Creating equitable spaces for all learners: Leveraging community expertise through situationally responsive instructional conversations

by

Melissa A. Holmes

B.A., Kansas State University, 2002
M.S., Kansas State University, 2004

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2022
Abstract

This qualitative study utilized positive discourse analysis (PDA) to explore the classroom discourse practices of three grade-level teachers at a highly diverse school. The purpose of the study was to investigate ways elementary teachers who employ biography-driven instruction (BDI) (e.g., Herrera, 2016) use discourse to invite and nurture student willingness to share about and maximize the sociocultural and linguistic dimensions of their biographies. The research questions guided investigation of (1) formal text properties of instructional conversation (ICs), (2) ways the social practices of the classroom influenced the discourse, and (3) institutional factors that challenged and supported use of culturally responsive/sustaining discourse practices.

Two primary sources of data included video of classroom instruction and two-part individual interviews. The interviews included video elicitation, which supported analysis of IC texts created from eleven selected episodes of IC. They also incorporated use of a semi-structured interview protocol to support exploration of institutional factors that influenced the three participants’ use of culturally responsive/sustaining discourse. Additional sources of data (e.g., documents, questionnaire, analytic memos) provided context regarding the members of the classroom learning communities and supported data analysis.

This study employed Fairclough’s (1989) three-part analysis progression of description (exploring aspects of the text itself), interpretation (focusing on the relationship between the situational context and the text), and explanation (making connections to broader institutional and societal contexts). Findings and conclusions revealed that culturally responsive/sustaining discourse (a) fostered relationships among members of the classroom community, (b) positioned students as knowledgeable and capable, (c) created a risk-free space for sharing knowledge and ideas, and (d) fostered equitable participation of all students. Social practices of the classroom
influenced the discourse in multiple ways and indicated that (a) use of mediation tools scaffolded engagement and language use, (b) use of multiple grouping structures fostered student talk, and (c) situationally attending to what students produced created opportunities to elicit and leverage assets. Building-level leadership was the most influential factor on the teachers’ use of culturally responsive/sustaining discourse.

The explanation phase of analysis (Fairclough, 1989) also included exploration of social determinants that influenced the discourse as well as the effects of the discourse in relation to ongoing struggles at situational, institutional, and societal levels. Many of the social determinants reflected hegemonic influences (e.g., cultural, linguistic) and deficit perspectives. Others were related to typical interaction patterns found in U.S. classrooms. Transformative influences of the IC discourse often revealed aspects of an asset perspective on culturally and linguistically students and emphasized pluralism (e.g., linguistic, epistemological). The teachers’ ICs illustrated how educators can create educational spaces that foster students’ sense of belonging and positive self-concept. The episodes further highlighted ways teachers can collaborate with students to leverage the expertise of all members of the classroom community toward collective learning and success. Processes that ensured equitable participation among all members of the community also were identified as transformative influences.
Creating equitable spaces for all learners: Leveraging community expertise through situationally responsive instructional conversations

by

Melissa A. Holmes

B.A., Kansas State University, 2002
M.S., Kansas State University, 2004

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2022

Approved by:

Major Professor
Socorro Herrera
Copyright

© Melissa Holmes 2022.
Abstract

This qualitative study utilized positive discourse analysis (PDA) to explore the classroom discourse practices of three grade-level teachers at a highly diverse school. The purpose of the study was to investigate ways elementary teachers who employ biography-driven instruction (BDI) (e.g., Herrera, 2016) use discourse to invite and nurture student willingness to share about and maximize the sociocultural and linguistic dimensions of their biographies. The research questions guided investigation of (1) formal text properties of instructional conversation (ICs), (2) ways the social practices of the classroom influenced the discourse, and (3) institutional factors that challenged and supported use of culturally responsive/sustaining discourse practices.

Two primary sources of data included video of classroom instruction and two-part individual interviews. The interviews included video elicitation, which supported analysis of IC texts created from eleven selected episodes of IC. They also incorporated use of a semi-structured interview protocol to support exploration of institutional factors that influenced the three participants’ use of culturally responsive/sustaining discourse. Additional sources of data (e.g., documents, questionnaire, analytic memos) provided context regarding the members of the classroom learning communities and supported data analysis.

This study employed Fairclough’s (1989) three-part analysis progression of description (exploring aspects of the text itself), interpretation (focusing on the relationship between the situational context and the text), and explanation (making connections to broader institutional and societal contexts). Findings and conclusions revealed that culturally responsive/sustaining discourse (a) fostered relationships among members of the classroom community, (b) positioned students as knowledgeable and capable, (c) created a risk-free space for sharing knowledge and ideas, and (d) fostered equitable participation of all students. Social practices of the classroom
influenced the discourse in multiple ways and indicated that (a) use of mediation tools scaffolded engagement and language use, (b) use of multiple grouping structures fostered student talk, and (c) situationally attending to what students produced created opportunities to elicit and leverage assets. Building-level leadership was the most influential factor on the teachers’ use of culturally responsive/sustaining discourse.

The explanation phase of analysis (Fairclough, 1989) also included exploration of social determinants that influenced the discourse as well as the effects of the discourse in relation to ongoing struggles at situational, institutional, and societal levels. Many of the social determinants reflected hegemonic influences (e.g., cultural, linguistic) and deficit perspectives. Others were related to typical interaction patterns found in U.S. classrooms. Transformative influences of the IC discourse often revealed aspects of an asset perspective on culturally and linguistically students and emphasized pluralism (e.g., linguistic, epistemological). The teachers’ ICs illustrated how educators can create educational spaces that foster students’ sense of belonging and positive self-concept. The episodes further highlighted ways teachers can collaborate with students to leverage the expertise of all members of the classroom community toward collective learning and success. Processes that ensured equitable participation among all members of the community also were identified as transformative influences.
# Table of Contents

List of Figures ........................................................................................................................................... xiv
List of Tables ................................................................................................................................................ xv
Acknowledgements ...................................................................................................................................... xvi
Dedication .................................................................................................................................................. xvii

Chapter 1 - Introduction .......................................................................................................................... 1
  Overview of the Issues .............................................................................................................................. 1
  Statement of the Problem .......................................................................................................................... 3
  Purpose and Research Questions .............................................................................................................. 4
  Methodology ............................................................................................................................................ 4
  Significance of the Study ........................................................................................................................... 6
  Definition of Terms ................................................................................................................................ 8
  Summary ............................................................................................................................................... 18

Chapter 2 - Review of the Literature ........................................................................................................ 19
  National Educational Context for the Study ............................................................................................ 19
  The Mediated Nature of Development and Thought .............................................................................. 21
    The Influence of Interpersonal Interaction on Learning ........................................................................ 22
    Language as Culturally Influenced (and Influencing) ........................................................................... 23
  Shared Identities of Discourse Communities .......................................................................................... 25
  Exploring Assets and Needs of Culturally and Linguistically Diverse Students ........................................ 28
  The Biopsychosocial History .................................................................................................................... 29
  The CLD Student Biography ..................................................................................................................... 31
    Sociocultural Dimension ......................................................................................................................... 31
    Linguistic Dimension .............................................................................................................................. 33
    Cognitive Dimension .............................................................................................................................. 35
    Academic Dimension .............................................................................................................................. 36
  Teaching and Learning within the Social Classroom Context ................................................................... 37
  Teaching and Learning through Conversation .......................................................................................... 41
  Teacher-Initiated Conversation ................................................................................................................ 42
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogic Teaching</td>
<td>43</td>
</tr>
<tr>
<td>Accountable Talk</td>
<td>44</td>
</tr>
<tr>
<td>Instructional Conversations</td>
<td>46</td>
</tr>
<tr>
<td>Interactional Scaffolding</td>
<td>49</td>
</tr>
<tr>
<td>Implications of Teacher-Initiated Conversation for Student Development</td>
<td>51</td>
</tr>
<tr>
<td>Social-Emotional Implications of Teacher-Initiated Conversation</td>
<td>51</td>
</tr>
<tr>
<td>Linguistic Implications of Teacher-Initiated Conversation</td>
<td>53</td>
</tr>
<tr>
<td>Cognitive Implications of Teacher-Initiated Conversation</td>
<td>55</td>
</tr>
<tr>
<td>Academic Implications of Teacher-Initiated Conversation</td>
<td>56</td>
</tr>
<tr>
<td>Student Conversation through Peer Interaction</td>
<td>57</td>
</tr>
<tr>
<td>Cooperation and Collaboration</td>
<td>58</td>
</tr>
<tr>
<td>Implications of Peer Interaction for Student Development</td>
<td>60</td>
</tr>
<tr>
<td>Social-Emotional Implications of Peer Interaction</td>
<td>60</td>
</tr>
<tr>
<td>Linguistic Implications of Peer Interaction</td>
<td>61</td>
</tr>
<tr>
<td>Cognitive Implications of Peer Interaction</td>
<td>62</td>
</tr>
<tr>
<td>Academic Implications of Peer Interaction</td>
<td>63</td>
</tr>
<tr>
<td>Evolving Pedagogies for CLD Students</td>
<td>64</td>
</tr>
<tr>
<td>Asset-Based Pedagogies</td>
<td>64</td>
</tr>
<tr>
<td>Culturally Responsive Teaching</td>
<td>65</td>
</tr>
<tr>
<td>Biography-Driven Instruction</td>
<td>68</td>
</tr>
<tr>
<td>Culturally Sustaining Pedagogies</td>
<td>72</td>
</tr>
<tr>
<td>The Need for Biography-Driven, Culturally Responsive/Sustaining Ecologies</td>
<td>75</td>
</tr>
<tr>
<td>Summary</td>
<td>77</td>
</tr>
<tr>
<td>Chapter 3 - Methodology</td>
<td>77</td>
</tr>
<tr>
<td>Methodological Framework</td>
<td>78</td>
</tr>
<tr>
<td>Epistemology</td>
<td>78</td>
</tr>
<tr>
<td>Theoretical Perspective</td>
<td>79</td>
</tr>
<tr>
<td>Methodology</td>
<td>81</td>
</tr>
<tr>
<td>Critical Discourse Analysis</td>
<td>83</td>
</tr>
<tr>
<td>Positive Discourse Analysis</td>
<td>87</td>
</tr>
<tr>
<td>Methods</td>
<td>90</td>
</tr>
</tbody>
</table>
Chapter 4 - Research Findings

Summary of Data Collected

A Snapshot of Classroom Communities

Abby Nelson
Leticia Ramirez
Michelle Scott

Findings from Positive Discourse Analysis of IC Episodes

Exploring ICs from Abby’s Classroom

Episode 1: Students as Learners and Experts

Episode 1 Description Phase: Digging into the Text
Episode 1 Interpretation Phase: Exploring the Situation
Episode 1 Explanation Phase: Connecting to Social Practice

Episode 2 The Power of Visual/Nonverbal Communication

Episode 2 Description Phase: Digging into the Text
Episode 2 Interpretation Phase: Exploring the Situation
Episode 2 Explanation Phase: Connecting to Social Practice

Episode 3: Bridging from the Known to the Unknown

Episode 3 Description Phase: Digging into the Text
Episode 3 Interpretation Phase: Exploring the Situation
Episode 3 Explanation Phase: Connecting to Social Practice

Episode 4: Learning through Reciprocal Exchanges

Episode 4 Description Phase: Digging into the Text
Episode 4 Interpretation Phase: Exploring the Situation
Synthesis of Findings

Findings Related to Research Sub-Question 1

Findings Related to Research Sub-Question 2

Findings Related to Research Sub-Question 3

The Transformative Potential of BDI ICs

Summary

Chapter 5 - Conclusions and Discussions

Introduction

Conclusions

Conclusions Related to Research Sub-Question 1

Conclusions Related to Research Sub-Question 2

Conclusions Related to Research Sub-Question 3

Implications of the Research

Theoretical Implications

Methodological Implications

Practical Implications

Limitations of the Study

Directions for Future Research

Recommendations for the Field

Recommendations for K-12 Schools

Recommendations for Teacher Preparation Programs

Summary

References

Appendix A - Inventory of Situationally and Culturally Responsive Teaching (ISCRT)

Appendix B - Informed Consent Form

Appendix C - Teacher Profile Questionnaire

Appendix D - Classroom Community Profile

Appendix E - Interview Protocol

Appendix F - Questions That Can Be Asked of a Text

Appendix G - Transcription Conventions

Appendix H - Episode 1 Transcription
Appendix I - Episode 2 Transcription .......................................................... 274
Appendix J - Episode 3 Transcription .......................................................... 276
Appendix K - Episode 4 Transcription .......................................................... 279
Appendix L - Episode 5 Transcription .......................................................... 282
Appendix M - Episode 6 Transcription .......................................................... 286
Appendix N - Episode 7 Transcription .......................................................... 289
Appendix O - Episode 8 Transcription .......................................................... 291
Appendix P - Episode 9 Transcription .......................................................... 293
Appendix Q - Episode 10 Transcription ......................................................... 294
Appendix R - Episode 11 Transcription ......................................................... 296
Appendix S - Learning Mediation Tools ......................................................... 300
List of Figures

Figure 2.1. Culturally Responsive/Sustaining Classroom Ecologies............................................. 76
Figure 3.1. Fairclough's Three-Dimensional Conception of Discourse........................................... 91
Figure 3.2. Methodological Framework Elements .................................................................................. 96
Figure 3.3. Interview Part 1: Teacher Perspective on IC Episode ....................................................... 109
Figure 3.4. Interview Part 1: Exchange of Perspectives ........................................................................ 109
Figure 3.5. Interview Part 1: Questioning for Clarification .............................................................. 110
Figure 3.6. Interview Part 2: Discussion of Institutional Factors ........................................................... 111
Figure 3.7. Sample Analytic Memo ...................................................................................................... 112
Figure 3.8. Example of VideoAnt Annotations ..................................................................................... 115
Figure 3.9. Three-Part Analysis Progression ....................................................................................... 117
Figure 3.10. Phases of Data Analysis ..................................................................................................... 118
Figure 4.1. Sample Mediation Tools ................................................................................................... 200
List of Tables

Table 3.1. Participant Profile Information ................................................................................. 103
Table 3.2. Reviewed Videos and Episodes Selected ................................................................. 106
Table 3.3. Discourse Features That Influenced IC Episode Selection ....................................... 108
Table 3.4. Data Utilized and Collected ...................................................................................... 113
Table 3.5. Alignment of Data Sources to Research Sub-Questions ........................................ 119
Table 4.1. Themes Reflected in IC Episodes ............................................................................. 130
Table 4.2. Questions Relevant to IC Texts ................................................................................ 197
Table 4.3. Tools of Mediation and Grouping Structures by Episode ........................................ 200
Table 4.4. Institutional Factors Influencing Transformative IC ................................................ 203
Table 4.5. Ways IC Is Socially Determined and Determining .................................................. 199
Table S.1. Description of Learning Mediation Tools ................................................................. 300
Acknowledgements

I thank God for bringing me to this place in my journey. He has been with me each step of the way, blessing me, inspiring me, guiding me, and reminding me of His constant love. With God, all things truly are possible.

I am especially grateful to my family for their never-ending support. I thank Christian for his love and unwavering belief in my abilities, his sacrifices to keep our family running, and his listening ear as I shared about the latest article, breakthrough in methodology, or (more often than not) tedious details that indicated I was one step closer to the finish line. I thank Benjamin, Hannah, and Nicholas for being troopers through everything. Their words, smiles, hugs, snacks, and notes of encouragement lifted my spirits and renewed my commitment to reaching the goal. I thank my parents for nurturing me and my love of learning, praying for me, and always reminding me of what matters most in life. I am also grateful to my siblings, in-laws, extended family, and spiritual family; I know I can always count on them for laughs, prayers, and support.

My academic and professional life has been filled with people who have believed in me, challenged me, and expanded my worldview. I thank my teachers and professors who pushed me to hone my writing and think in new ways. I am grateful to my mentor, Dr. Socorro Herrera, for sharing her passion for teaching and learning and for believing in the unique potential of every human being. I am also indebted to my committee members, Dr. Jia “Grace” Liang, Dr. Kevin Murry, and Dr. Della Perez, for their steadfast encouragement and feedback. I thank all my CIMA friends and colleagues, past and present, for sharing your knowledge, friendship, and life experiences. Special thanks to those who paved the way by proving, through your own work, that completing a dissertation was possible! Finally, my heartfelt gratitude goes to all the teachers and students who have provided me with a window into their own learning journeys. Thank you!
Dedication

To three amazing kids, Benjamin, Hannah, and Nicholas. You are my life’s greatest accomplishment. May you each find fulfilling ways to use your own gifts and talents to make the world a better place.
Chapter 1 - Introduction

In this chapter, I orient the reader to the issues that provided the backdrop to the study. I describe the problem addressed and specify the purpose and research questions. I then summarize the methodology that was used, including the methods of data collection and analysis. I articulate the significance of the study and define key concepts that will be discussed.

Overview of the Issues

The youth that engage in U.S. K-12 classrooms today comprise an increasingly diverse group with regard to both race and language background (Irwin et al., 2021; National Education Association [NEA], 2015). At the same time, disparities in academic outcomes persist among students of different racial groups, as well as between emergent bilinguals and native English-speaking students (National Center for Education Statistics [NCES], n.d.). Such disparities point to significant opportunity gaps for students who are culturally and linguistically diverse (CLD).

Research suggests that teachers influence the academic success and personal wellbeing of students through their expectations, instructional practices, and classroom interactions (e.g., Cholewa, 2014; Gentrup et al., 2020). An asset-based perspective, in which teachers validate learners and build on their strengths and backgrounds, has been found to yield enhanced student outcomes (e.g., Bristol & Martin-Fernandez, 2019; Darling-Hammond et al., 2020; Gay, 2018; Sampson & Garrison-Wade, 2011). One of the primary ways teachers create space for learners to share connections to their background knowledge and articulate their individual perspectives during the lesson is by providing opportunities for interaction. Teacher-initiated conversations (e.g., instructional conversations [ICs]) and student conversations with peers offer a wide range of social-emotional, linguistic, cognitive, and academic benefits for learners (e.g., Applebee et al., 2003; de Oliveira et al., 2020; Herrera, 2016; Johnson & Johnson, 2009; Michaels et al.,
2008; Resnick et al., 2018; Saunders & Goldenberg 1999; Teemant et al., 2011; Tharp et al.,
2000). Youth who bring nondominant cultures and languages find additional benefit when
interactional practices are embedded in the larger context of classroom instruction that is relevant
and responsive to their lived experiences and realities.

Pedagogical approaches used to responsively accommodate students’ cultures and
languages have been the focus of longstanding research and scholarship (e.g., Gay, 2000, 2010,
relevant pedagogy, culturally responsive teaching, biography-driven instruction) are founded on
sociocultural theory (e.g., Vygotsky, 1978) and seek to increase the relevance and
comprehensibility of the curriculum for CLD students. Biography-driven instruction (BDI) (e.g.,
Herrera, 2016) holds distinct advantages for emergent bilinguals, given its focus on
understanding and leveraging assets associated with the interrelated sociocultural, linguistic,
cognitive, and academic dimensions of the student biography. The reciprocal interactions that
make such leveraging of student assets possible occur through instructional conversations, which
are used throughout BDI lesson delivery.

More recently, researchers have called for educators to utilize pedagogies that
intentionally focus on sustaining the cultures, languages, and literacies of students and their
families (e.g., Alim & Paris, 2017; Paris, 2012; Paris & Alim, 2014). Heritage and community
practices are valuable to CLD students, their families, and their communities. However, they also
benefit all students—if brought into the learning space—in that they provide a more pluralistic
perspective for understanding and interacting with others (Paris & Alim, 2014). Biography-
driven, culturally responsive/sustaining classroom ecologies hold promise for maximizing
students’ assets and potentials to create more equitable and socially just learning conditions.
Statement of the Problem

The demographic divide between teachers who are predominantly White, female, middle-class, English-monolingual speakers and the students they educate (Frey, 2021; Haddix, 2017; Irwin et al., 2021; National Education Association, 2015; U.S. Department of Education, 2016) makes developing shared understandings within the classroom more difficult. Teachers often need support to better understand students and themselves, and to maximize students’ culturally bound ways of knowing (Flores et al., 2018; Herrera & Murry, 2016). Even teachers of Color who share the same race, ethnicity, or language as their students may not employ culturally and linguistically responsive/sustaining practices (Kressler & Cavendish, 2020). Like their White peers, teachers of Color schooled within the United States have experienced the historically hegemonic education system (Apple, 2019; Giroux, 1983, 1992; Gutierrez & Larson, 1994). Many were further prepared as teachers within predominantly White institutions of higher education. In short, the biography of a teacher, including their positionality within the larger sociopolitical context of the United States, influences their readiness to engage effectively with learners in culturally and linguistically responsive/sustaining ways (Herrera, 2022; Kavimandan, 2021).

BDI (Herrera, 2016) and culturally sustaining pedagogy (CSP) (Paris, 2012) provide teachers with research and theory-based guidance for instructional effectiveness with CLD learners, including emergent bilinguals. Herrera and colleagues (Herrera, Kavimandan, & Holmes, 2011; Herrera, Kavimandan, Perez et al., 2017) further support teachers’ theory-into-practice applications with more than 20 strategies that illustrate how to create contextual and situational conditions reflective of BDI. Yet teachers who have not experienced culturally responsive/sustaining instruction as learners lack such lived experiences and have few accessible
exemplars to draw upon. Additional research is needed that investigates how teachers use language in interaction with students to enact BDI principles and provide equitable, culturally responsive/sustaining learning opportunities.

**Purpose and Research Questions**

The purpose of this study was to explore the interactional dynamics between teachers and students in grade-level classrooms that reflected the cultural and linguistic diversity of today’s society. I specifically investigated ways in which elementary teachers who employ BDI (Herrera, 2016) used discourse to invite and nurture student willingness to share about and maximize the sociocultural and linguistic dimensions of their biographies. The research question and sub-questions that guided this study were: *In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?*

1. What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?
2. In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?
3. What institutional factors challenge and support culturally responsive/sustaining discourse practices?

**Methodology**

I approached this study from an interpretivist theoretical perspective, reflective of the constructionist epistemology. I utilized a qualitative design, which is appropriate when interpretation and descriptions resulting from discovery, analysis, and insight are intended outcomes (Creswell, 2014). Qualitative research also allows researchers to understand,
interrogate, or deconstruct (Bhattacharya, 2017). In this study, I sought to understand how
teachers use discourse as they engage in ICs with diverse communities of learners.

In this study, I employed discourse analysis to explore the research questions. I drew
upon critical discourse analysis (CDA), with my efforts guided by the work of Fairclough (e.g.,
CDA was influenced by social theorists (e.g., Althusser, 1971; Foucault, 1972; Gramsci, 1971)
as well as literacy theorists and linguists (e.g., Bakhtin, 1981, 1986; Halliday, 1978).
Fairclough’s approach focuses on social practices, which commonly reproduce social structures
but also have the power to transform them.

Methodologically, I approached the study from a positive discourse analysis (PDA)
perspective (Martin, 1999). PDA characterizes research that focuses specifically on
transformative uses of language to disrupt oppressive systems and practices. It offers the
complement to CDA work focused on asymmetries of power and hegemonic, oppressive forces
that analysts commonly seek to resist (Hughes, 2018; Luke, 1995; Rogers & Schaenen, 2014).
As described by Rogers and Wetzel (2013), this positive turn shifts the focus toward research
that explores “moments of hope, agency, and liberation” (p. 88). Researchers who employ PDA
strive to locate positive discourses that remain outside the mainstream. These discourses have the
potential to benefit society in valuable ways if they are made more prevalent. Through this study,
I endeavored to bring such positive classroom discourses to light.

Archived data utilized in this research included video recordings of classroom instruction
and documents (i.e., past teacher profile questionnaires, classroom community profiles). Data
collected for this study comprised current teacher profile questionnaires, individual interviews,
and analytic memos. Video recordings were be used to explore the interpersonal interactions, including both verbal and nonverbal communication, between teachers and students.

After identifying episodes of classroom discourse reflective of “critical moments” (Calle-Díaz, 2019), I created transcriptions that included the recorded language acts and key semiotic features. I analyzed the texts utilizing Fairclough’s (1989) three-part analysis progression of description (exploring aspects of the text itself), interpretation (focusing on the relationship between the situational context and the text), and explanation (making connections to broader institutional and societal contexts). The documents and teacher profile questionnaires provided information about the participants in the ICs, which supported the data analysis process. Two-part individual interviews provided an opportunity for member checking and also allowed me to gain insights into participants’ perspectives on teacher-student interactions as well as institutional factors that challenge or reinforce their efforts to engage in culturally responsive/sustaining pedagogical practices. Insights from these interviews also bolstered my ability to address issues related to uptake of transformative discourse (Bartlett, 2012; Rogers & Wetzel, 2013).

**Significance of the Study**

This study has both theoretical and practical significance for the field. The research responded to the call for studies that exemplify how language can be used for transformative purposes (e.g., Bloome & Talwalkar, 1997; Hughes, 2018; Luke, 2004; Martin, 1999, 2004). CDA is more typically used to explain how injustice, discrimination, and oppression influence discourse and are simultaneously instantiated through it (Caldas-Coulthard & Coulthard, 1996; Fairclough, 2013). Although such deconstructive efforts are essential for explaining the current state of affairs, providing examples of resistant, positive, reconstructive discourse opens the door
to new ways of imagining that can foster progressive social change (Hughes, 2018; Kress, 2000). By employing PDA to explore how teachers used language to create equitable classroom learning conditions, I sought to increase the overall visibility of PDA, while also more specifically illustrating how PDA can be used to promote educational change.

This study was also intended to contribute to the growing body of research and literature surrounding culturally responsive and sustaining practices. The potential of BDI (Herrera, 2016) to support holistic student outcomes for all learners, and especially for CLD students, has been documented through prior research (e.g., Holmes et al., 2018; Murry et al., 2020, 2021). Yet, I identified no studies to date that have focused on the classroom discourse practices of BDI teachers. Illustrating how the tenets of BDI are evidenced in classroom practice (e.g., ICs) has the potential to inform practitioners who seek to increase the responsiveness of their own instruction. Such insights might also inform the efforts of teacher educators as they prepare preservice and inservice teachers for effective practice with emergent bilinguals and other CLD learners.

Similarly, although CSP (Paris, 2012) has served to spur increased attention to the importance of sustaining the cultures, languages, and literacies of students and their families (see Paris & Alim, 2017, for examples of such efforts), I located no examples of scholarship that illustrated how CSP is evidenced in ICs to support learning in diverse elementary school contexts. This investigation, therefore, addressed this gap in the literature. The findings have the potential to support increased understanding among teachers and teacher educators of ways they can push back against the typical norms of classroom interaction to amplify the voices, practices, and perspectives of CLD students.
Definition of Terms

The following terms are key to the reader’s understanding of this study. As such, I provide a brief definition of each.

*Academic dimension:* A dimension of the CLD student biography that reflects all current and previous experiences with schooling (Herrera & Murry, 2016). These experiences are facilitated through the use of one or more languages to develop competencies related to specific content areas. Emergent bilinguals typically must negotiate the processes and challenges inherent to developing disciplinary knowledge and skills while at the same time gaining prowess in a second language. During biography-driven teaching, educators explore the degree to which students’ academic experiences have fostered educational access, engagement, and hope (Herrera, 2016).

*Accountable Talk:* A teacher-led but student-owned process that centers around a complex problem that requires collaboration (Resnick, Asterhan, & Clarke, 2018). Students think aloud about the problem, build off one another’s ideas (as well as those of the teacher), make claims and counter claims, question, and clarify. Accountable Talk comprises a set of techniques that highlight three interrelated dimensions: (1) accountability to the learning community, (2) accountability to knowledge, and (3) accountability to standards of reasoning (Michaels et al., 2008).

*Asset pedagogy:* A term used by Paris and Alim (2014) to characterize pedagogies that guide educators to use students’ culturally situated skills and knowledge as a bridge to their development of capacities perceived essential to academic success. Culturally responsive teaching and culturally relevant pedagogy both are considered asset pedagogies.
**Authentic cariño:** Care for another that values and nurtures relationships and is grounded on Latino cultural values such as family, community, education, and personalism (Curry, 2021; Valenzuela, 1999).

**Background knowledge:** An individual’s accumulation of learning and experiences from home (i.e., funds of knowledge [Moll et al., 1992], community (i.e., prior knowledge), and school (i.e., academic knowledge) over the course of their life (Herrera, 2016).

**Biography-driven instruction (BDI):** A communicative and cognitive method of instruction developed by Herrera (2010, 2016) designed to make the curriculum relevant, accessible, and rigorous for all students, especially emergent bilinguals. Teaching according to this method builds on the foundation of culturally responsive teaching (e.g., Gay, 2000, 2002) and hinges on responsiveness to the four interrelated dimensions of the CLD student biography (i.e., sociocultural, linguistic, cognitive, and academic dimensions). BDI lesson delivery is conceptualized according to three phases of instruction (i.e., activation, connection, and affirmation). *Note:* Herrera (2022) reframes BDI as an instructional framework that additionally applies the principles of cultural sustainability (e.g., Paris, 2012) to achieve liberatory praxis goals.

**Classroom ecology:** The characteristic nature of the classroom space that emphasizes the human element within the structures, arrangements, processes, and events that influence teaching and learning (Herrera, 2022).

**Cognitive dimension:** A dimension of the CLD student biography (Herrera, 2016) that reflects the learner’s culture-bound ways of perceiving and processing information about the world. In addition to being highly influenced by the student’s culture, cognitive processes are shaped by the primary language, and influenced by home and community norms. Through
biography-driven teaching, educators consider how students know, think, and apply—and artfully provide opportunities for students to demonstrate these in relation to the content concepts and skills of a given lesson.

*Critical consciousness:* A concept, also termed *conscientização*, that was developed by Brazilian educator Paulo Freire (1970/2018) to describe the process by which individuals learn “to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality” (p. 35). Critical consciousness relates to the ability of teachers to recognize societal, school, and classroom structures that serve to oppress and marginalize students of color (Flores et al., 2018).

*Culturally and linguistically diverse (CLD):* A descriptor for an individual whose culture and language do not reflect those of the dominant group (Herrera, 2016).

*Culturally and linguistically diverse (CLD) student biography:* A holistic conceptualization of the culturally and linguistically diverse student that takes into account challenges and processes related to four interrelated dimensions: the sociocultural, linguistic, cognitive, and academic dimensions (Herrera, 2016).

*Culturally responsive teaching (CRT):* A type of asset pedagogy developed by Gay (2000, 2010, 2018) that is designed to cultivate academic success while simultaneously fostering the cultural identity of ethnically diverse groups of learners. It involves “using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2002, p. 106).

*Culturally relevant pedagogy (CRP):* A type of asset pedagogy developed by Ladson-Billings (1994, 1995) that fosters student learning, development of cultural competence, and
critical consciousness. CRP provides the foundation for culturally sustaining pedagogies (see culturally sustaining pedagogy).

*Culturally sustaining pedagogy (CSP):* A type of pedagogy first proposed by Paris (2012) that builds on the principles of culturally relevant pedagogy (e.g., Ladson-Billings, 1994, 1995). Arguing that asset pedagogies (e.g., culturally responsive teaching) do not sufficiently state the intended outcome of equity focused pedagogies, Paris proposes culturally sustaining pedagogies that explicitly seek to sustain the heritage and community linguistic and cultural practices of students and families. A key goal of CSP is for all learners to develop linguistic and cultural dexterity and plurality. Emphasis is placed on developing a critical stance toward unequal power relations and engaging in critical action.

*Dialogic teaching:* Dialogic teaching draws on Bakhtin’s (1981) concept of *dialogisation*, which requires a mixing of unique ideas from different people to yield change in mental perspectives (Sedova, Salamounova, & Svaricek, 2014). Among widely accepted indicators of dialogic teaching are those proposed by Applebee et al. (2003), which include: (a) authentic, open-ended questions that elicit students’ ideas and perspectives; (b) coherence of dialogue made possible by uptake; (c) teacher feedback on responses that goes beyond issues of correctness to elaborate on the content; and (d) open discussion that features a minimum of 30 seconds of connected talk involving at least three speakers building upon one another’s ideas.

*Discourse:* Language reflective of a particular group or socially situated identity (Gee, 2014). It includes numerous genres or forms, such as conversations, classroom lessons, visual images, meetings, speeches, policies, textbooks, letters, film, multimedia, nonverbal communication, and more (Mullet, 2018). “Discourse” (with a capital “D”) distinguishes identity-based communication that employs language as well as everything else at a person’s
disposal (Gee, 2014). Individuals use Discourse to integrate and combine language, actions, and interactions as well as ways of valuing, believing, thinking, and using various tools, objects, and symbols as they enact a particular recognizable identity.

_Distributed cognition:_ A perspective that draws upon sociocultural theory (e.g., Vygotsky, 1978) and views thought as socially mediated and dispersed among individuals collaborating toward shared learning goals (Hutchins, 1995; Pontier & Gort, 2016)

_Distributed expertise:_ A perspective that draws upon sociocultural theory (e.g., Vygotsky, 1978) and views knowledge/skills as taking multiple forms, shared and leveraged among individuals engaged in collaborative activity toward a common goal (Brown & Campione, 1996; Pontier & Gort, 2016).

_Emergent bilingual:_ A learner who is developing proficiency in two (or more) languages. This descriptor reflects an asset perspective and emphasizes the broadening linguistic repertoire of the learner.

_English learner:_ A student who has a native language other than English and who is learning English as an additional language.

_Epistemic friction:_ The condition that exists when individuals acknowledge and engage with ways of thinking, feeling, and perceiving that differ from their own (Medina, 2013).

_Field:_ The dimension of register that reflects “what the participants in the context of situation are actually engaged in doing” (Halliday, 1978, p. 222). Others have described field as the construal of experience (Bartlett, 2012), the subject matter, or the social action taking place (Wells, 1994). Field also includes the goals, processes, and materials of the social activity (Wells, 1993). Field relates to the “experiential value” of text (Fairclough, 1989, p. 112), which includes contents, knowledge, and beliefs.
Hegemony: A concept described by Apple (2019) as “the central, effective, and dominant system of meanings, values, and actions which are lived” (pp. 4-5). This system of meanings and practices influences how individuals see and interact with the economic, social, and educational world as well as the commonsense interpretations they apply to the world. The ultimate effect of hegemony is that a particular view of the world becomes experienced as the only world.

i+TpsI: A mnemonic used in BDI (e.g., Herrera et al., 2017) to encompass the types of grouping structures predominantly used in the classroom. These include the individual student (i) prior to new learning, teacher-directed whole-group interactions (T), pair/partner work (p), small team interactions (s), and individual work for application and accountability (I).

Instructional conversation (IC): A conversation between the teacher and students that has a didactic purpose and reflects reciprocal interactions. During orchestration of the conversation, the teacher skillfully integrates curricular concepts and skills, students’ background knowledge and experiences, utterances of individual learners as they express thought processes and use new language structures, and emerging ideas of the learning community (Goldenberg, 1992-1993; Herrera, 2016).

Instructional opportunity structure: A type of opportunity structure characterized by academic tasks and activities that uphold or strengthen the cultural meaning systems that learners bring to the classroom (Gray, Hope, & Matthews, 2018).

Interactional scaffolding: A type of teacher-student interaction in which educators engage students in discourse that goes beyond initiation-response-evaluation patterns. Teachers elicit student elaboration and strive to promote meaning making and higher-order thinking. They probe, use verbal and gestural hints to support learners’ use of language, prompt elaboration,
highlight student efforts and emerging skills, and provide encouragement and affirmation (de Oliveira & Athanases, 2017).

**Intersubjectivity:** The degree to which different individuals share or negotiate a common understanding of a situation (Smagorinsky, 2018).

**Joint productive activity (JPA):** One of the five Standards for Effective Pedagogy and Learning (CREDE, 2021). JPA involves the teacher and students collaborating together to produce jointly created products. The teacher facilitates, monitors, and supports as students work with peers to develop the activity-related product.

**Linguistic dimension:** A dimension of the CLD student biography that reflects all the processes and challenges of acquiring language (Herrera & Murry, 2016). This dimension encompasses a learner’s proficiency in the native language, English, and any additional languages. It also includes dynamics of language acquisition (e.g., simultaneous versus sequential bilingualism). The linguistic dimension can vary significantly among learners, even among those who share the same country of origin. Biography-driven teaching requires educators to discover how students use their available language resources to communicate with others, express themselves, and comprehend.

**Mediation tool of learning:** A tangible scaffold for student engagement and language use, characterized by Herrera and colleagues (2017) as a “tool in the hand” (p. 149). Mediation tools used in this study included the DOTS chart, U-C-ME template, Vocabulary Quilt, Linking Language poster, and Tic-Tac-Toe board, as well as individual/small team and class connection posters. See Table S1 for a description of each tool.

**Mode:** The dimension of register that reflects the function of language in the situation (Halliday, 1978) and the degree to which the linguistic process is shared by all participants.
(Wells, 1993). In view of a given text, mode indicates relationships between parts of the text to
one another and to the specifics of the current context (Bartlett, 2012). Mode further accounts for
the spoken or written nature of the activity (Halliday, 1978; Wells, 1993). Similarities can be
found between mode and the “connective value” of text (Fairclough, 1989, p. 112), which
additionally accounts for ways text can point toward the intertextual context (i.e., connections to
other related texts).

*Opportunity structures:* Elements of the classroom or school environment that either
satisfy or thwart a learner’s need to belong; types of opportunity structures include interpersonal,
instructional, and institutional (Gray et al., 2018).

*Positionality:* A person’s relative location in society that reflects the multiple identities
chosen by the person, or those imposed by societal/external forces, which has implications for
access and power (Herrera, 2022).

*Relational care:* Care for another that involves natural caring or, in some relational
counters, ethical caring (Noddings, 2013).

*Register:* The semiotic structure of a situation that includes the dimensions of field, tenor,
and mode (Halliday, 1978; Halliday & Hasan, 1985). These distinguishing characteristics of the
register allow participants to discern the context of the situation, or “situation type” (Halliday,
1978, p. 230), which in turn influences the way they co-construct the text (Wells, 1994). The
register reflects the types of meanings selected by participants, as well as their expression in
vocabulary and grammar (Halliday, 1978).

*Semiosis:* A term used by Fairclough and colleagues (e.g., Chouliaraki & Fairclough,
1999; Fairclough, 2001; Fairclough et al., 2004) to describe the most general level of discourse.
The term is expansive enough to encompass multiple meaning-making modalities, including language, body language, and visual images.

_Scaffolding:_ The provision of temporary supports to learners until they are able to undertake a task themselves (Bruner, 1978; Smagorinsky, 2018). Knowledge of students’ assets and needs informs effective use of scaffolds to support each learner’s unique meaning-making process (Herrera, 2016). Although some scaffolds are planned, others are contingent on the emergent needs and reflect adaptive, situational aspects of teaching (de Oliveira & Athanases, 2017; Herrera, 2016).

_Situational awareness:_ A term used in this study to refer to a teacher’s attention to the multiple indicators of student engagement and sensemaking. Educators monitor learners’ socioemotional frames of mind, listen as students share ideas with peers (e.g., partners, small groups, whole class), and observe as students document ideas on learning tools. Such awareness is reflective of the teacher’s role as a researcher and participant observer (Herrera, 2022). This type of awareness makes effective situational processes possible.

_Situational processes:_ Adaptive acts of the teacher made as a result of on-the-fly decisions about how best to support students’ language acquisition and content learning (Herrera, 2016). Decisions are based on observations of how students are responding to instruction in the moment.

_Sociocultural dimension:_ A dimension of the CLD student biography (Herrera, 2016) that reflects the learner’s lived experiences, situated within the cultural contexts of his or her family, community, and the larger society. It takes into account the adjustments and processes that enable the student to function in idiosyncratic ways according to various (and often very different) norms inside and outside of school. It is influenced by social institutions (e.g., home,
school, church), affective factors (e.g., self-esteem, motivation, anxiety), and social interactive phenomenon (e.g., discrimination, prejudice, bias). Biography-driven instruction emphasizes the teacher gathering information in the context of daily lessons related to aspects of the student’s background that bring life, laughter, and love.

**Teacher authenticity:** A desirable quality that reflects the educator’s willingness to be genuine, truthful, and transparent (Plust et al., 2021).

**Tenor:** The dimension of register that characterizes the enactment of social relations (Bartlett, 2012). Tenor takes into account the “who” involved in the discourse of the event and reflects the status and roles of participants in relation to one another (Halliday, 1978; Wells, 1994). Parallels can be drawn between tenor and the “expressive value” and “relational value” of text (Fairclough, 1989, p. 112).

**Text:** The linguistic form of discourse that is either spoken or written (Fairclough, 1992; Halliday, 1978).

**Translanguaging:** The maximization of whatever linguistic abilities an individual uses in their daily life (e.g., García et al., 2017; García & Wei, 2014). A translanguaging perspective underscores the interconnectedness of languages to emphasize that bilingualism, for example, is inherently dynamic rather than merely additive. It is not curtailed by a limiting view of language that values only standard forms of languages, or even named languages. Instead, this perspective on language opens up possibilities for creative language use.

**Zone of proximal development (ZPD):** A theoretical construct proposed by Vygotsky (1978) to explain observed variances in demonstrated skill when students were individually assessed (reflective of actual developmental level) versus when they were assessed during interaction with more capable others (reflective of the level of potential development). The ZPD
is conceptualized as the distance between what a learner can do independently and what he or she can do with assistance.

**Summary**

This chapter provided an overview of issues that undergirded the investigation into the discourse practices of grade-level classroom teachers. I summarized the problem to be addressed and articulated the purpose and guiding research questions of the study. I further explored key aspects of the discourse analysis methodology that was used to answer the research questions. Methods of data collection and analysis were discussed to provide the reader with a general understanding of the PDA research. The theoretical and practical significance of the study also were explored. I concluded the chapter by defining key concepts germane to discussions throughout this dissertation. In the subsequent chapter, I provide a detailed review of the literature that informed development of the study.
Chapter 2 - Review of the Literature

In Chapter 2, I first summarize trends in the growing diversity of the U.S. public school student population, as well as related educational outcomes that serve as a call to action. I then provide an overview of the sociocultural theory that provides a foundation for the cultural and interactional focus of classroom learning in the current study. Such theory highlights the potential of today’s K-12 classrooms as sites for rich learning experiences, given the diversity of cultural backgrounds represented by students. Next, I explore the role of discourse communities in influencing the identity and worldview of teachers and students, who together create a shared discourse community as well. I then delve deeper into ways to understand CLD learners from a holistic, asset-based perspective. With this orientation to student diversity in mind, I discuss teaching and learning within the social context of the classroom. I highlight multiple ways conversation has been used as an instructional tool to advance student understanding and development. I subsequently discuss pedagogies for CLD students and conclude the chapter with a description of the composite theoretical framework for this study.

National Educational Context for the Study

The youth that engage in U.S. K-12 classrooms of today comprise an increasingly diverse group. The national student population became “minority majority,” with students of color outnumbering White students, for the first time in 2014 (Strauss, 2014). Based on total public elementary and secondary school enrollment in 2018, students were largely White (47%, down from 54% in 2009), Latinx (27%, up from 22% in 2009), and Black (15%, down from 17% in 2009), with smaller percentages identifying as Asian (5%), and Native American (1%) (Irwin et al., 2021). Greater linguistic diversity among students is also a defining characteristic of U.S. schools. One of every 10 learners is an emergent bilingual (Irwin et al., 2021; National Education...
Association [NEA], 2015), and this proportion is anticipated to increase to one of every four students by 2025 (New York University Steinhardt, 2018). More than 400 different languages are spoken by this country’s emergent bilinguals (NEA, 2015).

Along with increasing racial and linguistic diversity are persistent educational opportunity gaps. When exploring nationwide patterns of achievement, the race-based disparities are especially pronounced between White students and those students who are Black, Latinx, and Native American. For example, according to results of the 2019 National Assessment of Educational Progress (NAEP) for Grade 4 students, 45% of White students performed at or above proficient on reading while the same level of performance was demonstrated by only 18% of Black students, 23% of Latinx students, and 19% of Native American students (NCES, n.d.). Differences in the percentage of each group reaching the same level of performance in math reveal similar trends (i.e., White–52%, Black–20%, Latinx and Native American–28%).

Disparities in academic achievement between English learners (ELs) and non-ELs are also evident across subjects and grade levels (U.S. Department of Education [USDE], n.d.). For instance, 2019 NAEP reading assessment results indicated only 10% of ELs in Grade 4 performed at or above proficient compared to 39% of non-EL peers (NCES, n.d.). Similar trends held true for student performance in math, with only 16% of Grade 4 ELs at or above proficient, compared to 44% of non-ELs. Review of the same performance benchmarks for Grade 12 students revealed a larger gap between EL and non-EL subgroups in reading (36 percentage-points compared to 29 percentage points for Grade 4 students) and a smaller but still significant gap in math (22 percentage points compared to 28 percentage points for Grade 4 students). For both reading and math, a mere 3% of ELs in Grade 12 performed at or above proficient.
As these trends make clear, concerted efforts are needed to transform the education system in ways that address such patterns of inequity. Research suggests that teachers can significantly influence the academic success and personal wellbeing of students through their expectations, instructional practices, and classroom interactions (e.g., Cholewa, 2014; Gentrup et al., 2020). Many in the field have documented the detrimental effects associated with teachers who view diverse learners from a limiting, deficit perspective (e.g., Darling-Hammond et al., 2020; Garcia & Guerra, 2004; Kressler & Cavendish, 2020; Shim & Shur, 2018). Research and literature also demonstrate the enhanced outcomes that are possible when teachers instead validate students and build on their strengths and backgrounds (e.g., Bristol & Martin-Fernandez, 2019; Gay, 2018; Sampson & Garrison-Wade, 2011).

Yet much remains to be understood with regard to aspects of teacher quality that matter most for student learning, leading to what Muñoz, Scoskie, and French (2013) refer to as the “black box” of effective teaching (p. 219). The current study is designed to help demystify teacher actions and instructional processes that provide possibilities for transforming the educational system from the ground up, centering investigative efforts at the level of teacher-student classroom interactions. In the next section of this chapter, I provide an orientation to the learning perspective that underpins my exploration of teaching-learning classroom dynamics.

**The Mediated Nature of Development and Thought**

Sociocultural theory derived from the research and theorizing of Vygotsky points to the situated ways in which we mentally develop and come to know the world. Our interactions with the physical and the social world are indirect rather than direct, in that they are mediated by our use of tools, especially psychological tools or signs (Lantolf & Poehner, 2008). Psychological tools vary by culture and include symbols, signs, texts, graphic organizers, and formulas that,
once internalized, we use to gain a degree of control over psychological functions such as attention, perception, and memory (Kozulin, 2003). Using external signs (e.g., written language) to improve our psychological functions qualitatively transforms of our thinking processes (Miller, 2011; Wertsch, 2007). As Vygotsky (1981) explained, use of a psychological tool “alters the entire flow and structure of mental functions” (p. 137). Human consciousness thus emerges from our biological brains working in unity with the symbolic artifacts and activities that are culturally created (Lantolf & Poehner, 2008).

Vygotsky further proposed that the emergence of human mental abilities is twofold: first, on the intermental plane, via culturally organized interactions with others (e.g., learning how to take part in religious ceremonies) and second, on the intramental plane, via interactions with symbolic artifacts (e.g., written texts) (Lantolf & Poehner, 2008; Vygotsky, 1978). Mental development, as such, involves interactions with others and internal mental processes. I discuss each of these types of influences in turn.

The Influence of Interpersonal Interaction on Learning

To describe how human interaction influences development, Vygotsky utilized the concept of zone of proximal development (ZPD). Vygotsky proposed the ZPD to explain observed variances in demonstrated skill when students were individually assessed versus when they were assessed during interaction with others. He posited that individual assessment only reflected what a child has already learned or is able to do (i.e., zone of actual development). On the other hand, through explicit mediation provided by adults or more capable peers in the learning context, abilities that are “ripening” could be discovered. Characterizing the ZPD, Vygotsky (1978) explained:
The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed the “buds” or “flowers” of development rather than the “fruits” of development….what is in the zone of proximal development today will be the actual developmental level tomorrow—that is, what a child can do with assistance today she will be able to do by herself tomorrow. (pp. 86–87)

A focus on only the actual development of a learner, therefore, fails to account for skills that are emerging and developing. These skills must be nurtured to full development. Such growth, however, takes time and requires the support of others.

A long-term developmental view of how a person learns to think reflects Vygotksy’s intent (Smagorinsky, 2018). The “tomorrow” of this passage is a metaphorical rather than literal tomorrow. Teachers who foster learning in the ZPD look for “buds” of development and purposefully nurture these. They build on students’ incremental growth by providing direct assistance and by creating opportunities for peer interaction, which allows students to mediate learning for one another.

**Language as Culturally Influenced (and Influencing)**

One of the primary symbolic tools that we use to develop our understanding of the world is language. Language carries with it more than just labels for concepts, grammar rules, and expectations for syntax. Rather, it is imbued with the culture of people who use it in daily life to create meaning and communicate with others. Culture can be considered:

. . . membership in a discourse community that shares a common social space and history, and common imaginings. Even when they have left that community, its
members may retain, wherever they are, a common system of standards for perceiving, believing, evaluating, and acting. (Kramsch, 1998, p. 10)

A person might learn a second language—that is, merely the form of the new language—and still understand the world in ways that reflect the shared, socialized patterns of (a) interpreting the world, (b) engaging in social interactions, and (c) making value-based judgements that are characteristic of the first language discourse community.

As embodied activity, language is not merely learned, it is lived (Haught & McCafferty, 2008). Language used by a person, situated in a particular context, carries a history along with it. Utterances can be considered simultaneously heteroglossic, reflective of multiple voices located within the cumulative experiences a person has lived up to that point, as well as dialogic, responsive to the current conversation and influencing its trajectory (Bakhtin, 1981; Haught & McCafferty, 2008). For this reason, language is not neutral or ahistorical (García, 2017); rather, it is imbued with individual and collective memory as it is used by individuals (situated in particular times, places, and situations) to interpret the past, navigate the present, and construct the future.

Recognizing how individuals engage with language to interpret and produce their social worlds through interactions with others (i.e., engage in languaging), García (2017) advocates for translanguaging practices. Translanguaging (e.g., García et al., 2017; García & Wei, 2014; underscores the interconnectedness of languages to emphasize that bilingualism, for example, is inherently dynamic rather than merely additive. It is not curtailed by a limiting view of language that values only standard forms of languages, or even named languages. Instead, translanguaging honors whatever linguistic abilities an individual uses in their daily life and opens up possibilities for creative language use. A translanguaging perspective is especially important in schools.
Students’ language assets are situated within the histories and cultures of their families and communities. Educators hold the power to either affirm and maximize those assets (while also ensuring learners develop the language skills needed for success), or validate only those that meet narrowly defined norms of academic use (García, 2017). Translanguaging thus enhances the potential of language as a psychological tool.

Mediation of learning, therefore, occurs both through interactions with more capable others and through use of psychological tools. Opportunities to interact with others who possess greater knowledge or skill also supports the advancement of emerging abilities. Learners are challenged to greater levels of understanding when they are able to observe more advanced applications of skill and engage with more complex ideas. Psychological tools, such as language, provide culturally influenced ways to support development of autonomy. Use of such tools illustrates the active role of learners in managing their own cognitive processes. A translanguaging stance can further support students to make use of culturally influenced knowledge and skills that allow them to engage most fully with their social environment. Such language use also reflects their belonging as members of larger communities, which are discussed next.

Shared Identities of Discourse Communities

Language, along with customs, cultural practices, and at times religion, all work together to reflect a shared group identity commonly associated with ethnicity (Alcoff, 2006). However, shared discourse communities can also be found among much smaller groups of individuals. A classroom learning community comprised of students and the teacher is one example (Ardasheva, Howell, & Vidrio Magaña, 2016). When we use language reflective of a particular group, or socially situated identity, we utilize a social language and engage in discourse (Gee,
The discourse of a given classroom community, therefore, will necessarily differ in its particularities from that of any other classroom. Together, the teacher and students develop shared expectations about how language will be used in teaching and learning processes.

Recognizing that we utilize more than just language to communicate who we are and what we are doing, Gee (2014) proposes use of “Discourse” (with a capital “D”) to distinguish identity-based communication that employs language as well as everything else at our disposal. As Gee explains, Discourse is used for “combining and integrating language, actions, interactions, ways of thinking, believing, valuing, and using various symbols, tools, and objects to enact a particular sort of recognizable identity” (2014, p. 46). Discourse in a classroom context might be characterized, for instance, by shared expectations for engagement and interaction, use of particular instructional and learning strategies, creation of personalized learning tools, application of specific questioning techniques, utilization of multiple languages for learning, and openness to critical analysis. Enculturation within a given group allows members to interact in specific ways and communicate within the Discourse community, often without conscious awareness that such communication is culturally influenced.

How an individual sees the world is reflective of the multiple Discourse communities of which they have been a part. Consider, for example, influences of race, culture, socioeconomic status, religion, nationality, and so forth. Then consider the smaller groups in which one might have been immersed (e.g., groups related to video gaming, music, baking, sports, crafts, graduate school), each of which has a particular way of using language, a common set of tools, and norms for interaction. These situated identities influence the lens through which one views the world around them.
Different terms are used to describe the stories or typical unfolding of events that people employ in order to know and make sense of the world. Examples include “schemas” (Piaget, 1972), “frames” (Fillmore, 1975), “scripts” (Schank & Abelson, 1977), “cultural models” (D’Andrade, 1984), “mental models” (Gentner & Stevens, 1983), and “figured worlds” (Holland, Skinner, Lachicotte, & Cain, 1998). Gee (2014), for instance, uses “figured worlds,” describing them as “simplified, often unconscious and taken-for-granted theories or stories about how the world works that we use to get on efficiently with our daily lives” (p. 95). We imagine and run simulations in our minds about prototypical events (e.g., weddings) that allow us to both make predictions about what will happen and interpret the behaviors and actions we witness at such events. Although our personal figured worlds will differ from those of other people, they generally are similar enough to those of other individuals in our shared social and cultural groups that they support communication, interaction, and understanding (Gee, 2014). The challenge (and opportunity for growth) comes when individuals bring vastly different figured worlds to the same shared space.

The wide diversity of racial, cultural, and language groups represented among students in classrooms today make it unlikely that an entire classroom community will utilize similar figured worlds. Given the demographic divide between predominantly White, female, middle-class, English-monolingual teachers and the increasingly diverse students they teach (Frey, 2021; Haddix, 2017; Irwin et al., 2021; National Education Association, 2015; U.S. Department of Education, 2016), finding ways for teachers to better understand and incorporate students’ ways of knowing has been a long-standing area of research and scholarship (e.g., Gay, 2000, Ladson-Billings, 1994, 1995; Herrera & Murry, 2005; Herrera, 2010; Wyatt, 2015).
Even educators who share the same race, ethnicity, or language as their students may not employ culturally and linguistically responsive/sustaining practices (Kressler & Cavendish, 2020). Like their White peers, teachers of Color schooled within the United States have experienced the historically hegemonic education system (Apple, 2019; Giroux, 1983, 1992; Gutierrez & Larson, 1994). Many were further prepared as teachers within predominantly White institutions of higher education, which often fail to maximize the sociocultural, linguistic, cognitive, and academic assets of CLD teacher candidates (Carter Andrews et al., 2019; Herrera, Morales et al., 2011). They then return to teach in educational systems that reflect that the same long-standing patterns of inequity and the same tendencies to overlook/reject the assets that CLD teachers bring (Herrera, Murry, & Holmes, 2022; Kohli, 2019).

In short, one cannot make assumptions about teachers’ readiness to engage effectively with learners in culturally and linguistically responsive/sustaining ways based solely on their racial/ethnic identity; instead, the entire biography of teachers, including their positionality within the larger sociopolitical context of the United States, must be considered (Herrera, 2022; Kavimandan, 2021). Before any teacher can feasibly incorporate students’ worldviews in the classroom, they first must understand learners as complex and multidimensional individuals. I explore this topic in detail in the subsequent section of this chapter.

**Exploring Assets and Needs of Culturally and Linguistically Diverse Students**

To support understanding surrounding the complexity of backgrounds represented by CLD learners, researchers have used various theoretical constructs. Two such constructs are the biopsychosocial history and the CLD student biography. I discuss each of these constructs in
turn, especially as it relates to the education of students whose cultures and languages differ from those of the dominant culture and language in U.S. society (Herrera & Murry, 2016).

**The Biopsychosocial History**

To better understand the holistic identities of CLD students, Herrera, Cabral, and Murry (2020) utilize the concept of a *biopsychosocial history*. Drawing on the work of Engel (1977), Gates and Hutchinson (2005), and Saleebey (2001), Herrera and colleagues characterize “biopsychosocial” as a descriptor for essential aspects of the human experience. The “bio” portion of the term is reflective of the student’s health and wellbeing, both physical and mental. Key considerations include prior and current nutrition; medical, dental, and vision screenings and services; opportunities for sleep and rest; and stressors (e.g., living conditions, after-school work). This aspect also reflects the student’s natural abilities (e.g., giftedness in using social-affective skills, drawing) and personality traits (e.g., extrovert vs. introvert). Herrera (2022) urges teachers to especially consider their assumptions, perspectives, and responses in relation to visible identity markers, such as the color of a student’s skin, developmental milestones (which often reflect culturally-bound assumptions), and the student’s physical health (e.g., nutrition).

According to Herrera et al. (2016), the “psych” aspect in biopsychosocial reflects considerations for potential experiences—especially among refugee students and those who have immigrated from other countries—with war, violence, natural disasters, or oppressive political or governmental regimes. It also encompasses factors such as the current sociopolitical dynamics of the receiving country, the (non)acceptance of the native language, the student’s anxieties or concerns (e.g., stressors related to acculturation, peer groups, academics), or symptoms indicative of depression, withdrawal, anger, or persistent homesickness. Additional factors that might influence student performance include psychological disorders, trauma, and reactions
arising from prior or current negative experiences. An understanding of the “psych” aspect also requires attending to the student’s identity, cognitive belief system (e.g., self-efficacy as a learner), and socioemotional coping skills (Herrera, 2022).

The “social” portion of the term includes sociocultural considerations related to recency of immigration; involvement in the decision to come to the United States; adjustment to the new country, community, and school; and family employment opportunities and schedules. This aspect encompasses family access to others who share the same ethnicity, home culture, or native language. It goes beyond the demographic characteristics of the family to include family dynamics (e.g., roles and responsibilities among members) and community systems (Herrera, 2022). The “social” aspect factors in differences/similarities between the home culture and school culture as well as differences/similarities between previous and current educational systems. Also included is consideration for the social climate of the school and the degree to which the classroom space is supportive of the student’s sense of belonging and social-emotional wellbeing (Herrera et al., 2016).

The “bio,” “psych,” and “social” aspects of the biopsychosocial history are not rigidly defined nor mutually exclusive, as many factors have implications for more than one aspect. Taken together, the biopsychosocial history of the student provides educators with a multitude of factors that might influence behavior and performance demonstrated in academic settings. This history supports educators by fostering exploration of student needs that might require additional support and sensitivity. It also fosters discovery of students’ natural abilities and supports (e.g., resilience, extended family network) that facilitate personal and academic wellbeing. The biopsychosocial history is also closely connected to the concept of the CLD student biography, which is discussed next.
The CLD Student Biography

Although the biopsychosocial history serves as a backdrop for understanding CLD students, the CLD student biography (Herrera, 2016; Herrera & Murry, 2016) provides educators with a more in-depth look at the assets, challenges, and processes associated with four interrelated dimensions of the holistic student: the sociocultural, linguistic, cognitive, and academic dimensions. These biography dimensions evolved from the work of Thomas and Collier (1995, 1997), whose prism model named these dimensions as the foundation for teaching and learning, especially in relation to the linguistic and academic growth of emergent bilingual students (Herrera, 2016). Across the last two decades, Herrera and Murry have expanded upon these dimensions to support teachers’ understanding and utilization of the CLD student biography to accelerate language and content learning. Each of these dimensions is discussed in turn.

Sociocultural Dimension

The sociocultural dimension of the CLD student biography, as described by Herrera (2016), reflects the student’s lived experiences, situated within the cultural contexts of their families, communities, and larger society. It takes into account the adjustments and processes that enable students to function in the idiosyncratic ways according to various (and often very different) norms inside and outside of school. This dimension is influenced by social institutions (e.g., home, school, church), affective factors (e.g., self-esteem, motivation, anxiety), and social interactive phenomenon (e.g., discrimination, prejudice, bias).

Herrera (2016) suggests that traditional school-initiated responses to this dimension include conducting home visits, utilizing interest surveys, and creating a safe learning environment. However, although these are the most common responses, not all schools and
teachers choose to employ them. Preparedness for such action requires educators to possess a level of cultural consciousness (Flores et al., 2018) that allows them to at least minimally recognize their individual positionalities, perspectives, and privileges and realize they are not universally held. Seeing the benefits to be gained from interacting with families, identifying student interests, and creating conditions that ensure students feel safe in the classroom is indicative of dispositions that, at least to some degree, counter deficit perspectives of CLD students and families.

The resolve of schools and teachers, however, must outweigh pressure to maintain longstanding monocultural, assimilationist ways of interacting and engaging in the teaching and learning enterprise. In the case of home visits, it often requires finding creative ways to navigate concerns held by schools/districts (e.g., liability, safety), teachers (e.g., cross-cultural uncertainty, language barriers) and parents (e.g., fears related to immigration, child protective services, etc.) (Kronholz, 2016). Teachers who respond to the sociocultural dimension in traditional ways might also learn about the traditions of different ethnic groups and make sure the classroom environment and curriculum reflect, to some degree, the lives of their students. They might use words and phrases of a student’s native language to facilitate communication and demonstrate interest. While these actions can provide some insights and demonstrate respect for various cultures, the information gathering strategies generally yield only point-in-time information.

Instruction that explicitly builds upon the CLD student biography (i.e., Biography-Driven Instruction, described later in this chapter) goes a step further to emphasize gathering additional information in the context of daily lessons related to aspects of a student’s background that bring life, laughter, and love. These aspects are not static, and they are deeply situated within the
student’s cumulative and culturally influenced experiences (Herrera, 2016). As such, students need regular opportunities to share authentic connections to their lives. Teachers, especially those who do not share the same types of lived experiences as the students, benefit from discussing the elicited ideas with learners to better understand the realities, perspectives, and experiences from which they originated.

The sociocultural dimension has been fittingly referred to as the heart of the CLD student biography (Herrera & Murry, 2016) that gives life to the other dimensions. It attends to the social-emotional needs of learners, including development of a positive self-concept that reflects (a) confidence that they have the ability to learn and be successful, (b) belief that their perspective matters, (c) certainty that they can contribute to the learning of the larger classroom community, and (d) assurance that their cultures and languages are inherently valuable (Herrera, 2016). Teachers support students to develop a positive self-concept by positioning them as knowledgeable and capable and utilizing their words and ideas to facilitate instruction (Herrera, 2016; see Kayi-Aydar and Miller, 2018, for a review of studies that use positioning theory to explore classroom interactions). When students see teachers making efforts to develop relationships with them and attend to their social-emotional needs, they are more likely to engage in academic learning (Guthrie, Rueda, Gambrell, & Morrison, 2009). A greater sense of belonging also fosters students’ abilities to connect meaningfully with the content (Boston & Baxley, 2014; Gray et al., 2018), which in turn promotes student success in school and beyond (Herrera, 2016; Sousa, 2017).

**Linguistic Dimension**

The *linguistic dimension* reflects all the processes and challenges of acquiring language (Herrera & Murry, 2016). For emergent bilinguals, these processes typically involve years of
developing both the basic interpersonal communication skills (BICS) needed for social interactions and the cognitive academic language proficiency (CALP) needed for success and in school (Cummins, 1981). Emergent bilinguals progress through theorized stages of second language acquisition (Krashen & Terrell, 1983), developing increasingly complex and nuanced understandings of English and dexterity in its use (Herrera, 2016). The biographies of CLD students in the same classroom, and even among students from the same country of origin, can reflect very different linguistic dimensions (e.g., proficiency in the native language, English, and additional languages; simultaneous versus sequential bilingualism).

Schools traditionally have responded to the linguistic dimension with a heavy emphasis on the assessment of students’ listening, speaking, reading, and writing skills. Learners are tested upon their entry to U.S. schools, placed in programming according to results, and regularly monitored using additional assessments. Although such evaluations of proficiency and progress can, under ideal conditions, provide a broad brushstroke of understanding related to the learner’s skills, they do little to inform teachers of how students might best be supported and challenged within the context of daily lessons (Herrera, 2016; Herrera et al., 2020). This level of responsiveness requires attention to the language that learners produce in communicative interactions and in response to academic tasks.

Biography-driven teaching requires educators to dig deeper to discover how students use their first, second, and any additional languages to communicate with others, express themselves, and comprehend. These patterns of language use are unique to the individual and heavily influenced by the sociocultural dimension. Although commonalities may exist, they cannot be generalized across learners, even among learners who share the same first language (Herrera, 2016). Family and peer preferences for language use, as well as societal influences (e.g.,
expectations to conform to English norms) can influence students’ use of language and personal preferences.

**Cognitive Dimension**

The *cognitive dimension* of the CLD student biography is similarly influenced by the culture-bound ways in which the student perceives and processes information about the world. Herrera (2016) draws on the work of Sousa (2011) to explain how the brain filters out sensory information deemed unnecessary or irrelevant. Information that makes its way to intermediate memory can then be influenced by information in long-term storage. As the learner manipulates information in working memory, connections that foster sense and meaning then facilitate retention of learning.

Traditional school responses to the cognitive dimension have, over time, variously emphasized differences in student learning styles, learning strategies, and processing of information. Teachers commonly strive to vary task complexity and difficulty; they also support students to understand and apply different types of learning strategies (e.g., metacognitive, cognitive, and social/affective strategies promoted by Chamot and O’Malley, 1994). Through biography-driven teaching, teachers consider the ways students know, think, and apply—and artfully provide opportunities for students to demonstrate these in relation to the specific content concepts and skills of a given lesson (Herrera, 2016). Again, cognitive processes are highly influenced by the student’s culture, shaped by the primary language, and influenced by home and community norms. The cognitive dimension is therefore integrally connected to both the sociocultural and linguistic dimensions.
Academic Dimension

The academic dimension of the learner reflects all current and previous experiences with schooling (Herrera & Murry, 2016). These experiences are facilitated through the use of one or more languages to develop competencies related to specific content areas. Emergent bilinguals typically must negotiate the processes and challenges inherent to developing disciplinary knowledge and skills while at the same time gaining prowess in a second language.

Traditional school-initiated responses to the academic dimension emphasize prior schooling records, grades, and state assessments (Herrera, 2016). While these sources of information can provide some basic insights into a student’s academic past, the information (if available) is rarely contextualized in classroom learning or reflective of the full potential of a learner. Instead, they often provide a narrow view of capability and achievement and can set the stage for low expectations and reductionistic curricula and instruction.

During biography-driven teaching, educators explore the degree to which students’ academic experiences have fostered educational access, engagement, and hope (Herrera, 2016). Issues of access include consideration of the language of instruction, the curricular materials used, and teacher efforts to discover and build upon learners’ background knowledge. Students’ sense of belonging and the level of care demonstrated by teachers play key roles in how (and whether) students engage in classroom learning (Gray et al., 2018). Gray and colleagues (2018) employ the concept of opportunity structures, or elements of the classroom or school environment that either satisfy or thwart a learner’s need to belong. By providing supportive interpersonal, instructional, and institutional opportunity structures, educators can increase the likelihood that all students feel connected, respected, and valued (Gray et al., 2018). Moreover, learners are supported to develop agency, and when they perceive pathways toward their current
and future goals, they experience a greater degree of hope for their academic success (Herrera, 2016; Snyder et al., 1991). Such hope does not develop overnight. When interpreting classroom behavior and perceived levels of motivation, for example, teachers must consider implications of the learners’ full educational history for current states of mind.

When considered in tandem, the biopsychosocial history and the CLD student biography provide educators with ways of conceptualizing the complexities surrounding any given learner. The constituent aspects/dimensions of the two concepts prompt teachers to reflect on and investigate the many factors that might influence a student’s response to (and success with) classroom instruction, the curriculum, and opportunities for interaction. They remind educators to see learners first as unique human beings, and then as students with whom they share time and space (Tomlinson & McTighe, 2006). In the discussion to follow, I further explore dynamics of interaction between and among actors (e.g., teachers, students) in the shared setting of the classroom.

**Teaching and Learning within the Social Classroom Context**

Teaching and learning do not happen in a vacuum. Rather, they are contextualized within a given space, at a given time, and with a specific group of people. As such, sociocultural theories of learning are realized within schools and classrooms in which the complex histories and biographies of students and teachers intersect. For example, the assistance provided to learners according to the Vygotskian concept of the ZPD is situated within a larger social system (Moll, 1990). Moll emphasizes the collective aspect of learning, insisting the ZPD is a characteristic not solely of the child or of the teaching but of the child engaged in collaborative activity within specific social environments. The focus is on the social
system within which we hope children learn, with the understanding that this social system is mutually and actively created by teacher and students. (1990, p. 11)

This expanded understanding of the ZPD draws attention to the significance of the cultural backgrounds and worldviews of both learners and teachers, especially given the demographic discrepancy between the relatively homogenous teaching force (e.g., 79 percent White, 76 percent female) and the CLD student population in today’s classrooms (Irwin et al., 2021). Smagorinsky (2018) pinpoints implications for educators.

This expansion of the ZPD requires any instructional episode to be contextualized, not only in terms of the immediate surroundings but also in light of the value systems embedded in the assumptions of these surroundings through their historical practices and institutional values (cf. Newman, Griffin, & Cole, 1989). Simply putting teacher and learner together will not produce a scaffold, given the importance of intersubjectivity—the degree to which different people share an understanding of their situation—in learning, and the difficulties that many teachers and students have in working according to shared assumptions. (pp. 255-256)

Historically entrenched policies and practices of U.S. schools are contextualized within (and reflective of) sociopolitical settings/dynamics that work to the advantage of dominant groups (e.g., White, native-born, native-English speakers), and to the detriment of other groups (e.g., people of Color, immigrants, emergent bilinguals). Histories of interaction, both positive and negative (e.g., isolation, discrimination, microaggressions), accompany present situations. When teachers and students, or students and their peers, share little in common with regard to worldviews and experiences, trust and understanding cannot be assumed and are unlikely to exist without active effort by all involved. Such reasoning provides the bedrock for the urgency of
educators to critically reflect upon their assumptions about students, families, schooling, and teaching (Herrera & Murry, 2016).

Value-laden assumptions reflect one’s socialization in a particular context. This socialization, by its nature, is influenced by individuals’ multiple intersections of identity and privilege (or lack thereof). Developing the intersubjectivity advocated by Smagorinsky (2018) requires **mutual accommodation** (Herrera & Murry, 2016), a give-and-take process to achieve shared goals, on the part of both the teacher and the learner. In order for teachers to better understand learners, and for students to understand one another, classrooms must provide opportunities for interaction and collaboration that create spaces for disclosure and dialogue.

From a Vygotskian standpoint, students bring different *lived experiences*—that is, experienced realities as filtered through the individual lens of the child—to the classroom (Esteban-Guitart & Moll, 2014). These lived experiences influence the learning process. The social and cultural situations provided in the classroom serve to either constrict or offer possibilities to the learner. How an individual ultimately experiences a situation is further influenced by psychological phenomena such as memory, self-concept, motivation, and perception. As learners interact with others, they experience themselves and are perceived by others in specific ways, which in turn influences the ongoing creation and recreation of their identities (Esteban-Guitart & Moll, 2014; Lee, 2017). This Vygotskian view of experience and identity development (Esteban-Guitart & Moll, 2014) highlights the complexities behind a relatively simple term such as *interaction*.

Interactions, as subjectively lived, will differ for each student and for the teacher. Operating at a superficial level that treats classroom interactions, situations, or events as objective reality ignores the mediation of social, cultural, historical, and psychological factors.
Teachers attuned to their own positionality and aware of their role in creating equitable educational opportunities also accept responsibility for creating a classroom ecology that amplifies rather than restricts possibility.

A classroom ecology emphasizes the human element within the structures, arrangements, processes, and events that influence teaching, learning, and relationships (Herrera, 2022). At the heart of equitable and uplifting classroom ecologies are teacher efforts that illustrate a willingness to set aside self, prioritize the learner, and teach from an asset perspective. Positive teacher–student relationships result when the ecology reflects the educator’s loving care for each learner of the classroom community (Herrera, 2016). Such caring has been characterized as authentic cariño (Curry, 2021; Valenzuela, 1999) and reflects Noddings’s (1984, 2013) approach to caring interactions.

Teacher actions that reveal their authenticity (e.g., sharing a personal connection to the topic) encourage learners to incorporate their personal connections and experiences as well (Plust, Murphy, & Joseph, 2021). Such sharing and relationship building set the stage for the classroom to become a “public space,” which Giroux (1997) describes as “a concrete set of learning conditions where people come together to speak, to dialogue, to share their stories, and to struggle together within social relations that strengthen rather than weaken the possibility for active citizenship” (p. 106). This type of learning space requires honesty, humility, and a willingness to listen.

A key part of this process can be expressed as coming to understand a student’s funds of identity, which Esteban-Guitart and Moll (2014) define as “historically accumulated, culturally developed, and socially distributed resources that are essential for people’s self-definition, self-expression, and self-understanding” (p. 37). These resources encompass geographical, practical
(relating to any meaningful activity, such as music or work), cultural, social, and institutional funds of identity. They are instrumental to a student’s identity and, as such, have ramifications for the learner’s cognitive belief system about self, both as an individual and as a learner. To discover these funds of identity, as well as family-based funds of knowledge (Moll, Amanti, Neff, & González, 1992) to which they oftentimes are connected, teachers can create opportunities for student interaction. In the subsequent section of this chapter, I explore ways conversation is elicited and fostered through classroom interactions to achieve multifaceted instructional goals.

Teaching and Learning through Conversation

Interaction in the classroom that fosters discussion is lauded for the multifaceted impact it has on teaching and learning processes. Learning through discussion is not a new idea. The concept can be traced back to the efforts of Socrates and other philosophers (Michaels, O’Connor, & Resnick, 2008). In today’s K-12 classrooms, conversation between teachers and students, and among students themselves, is encouraged by many educational researchers (e.g., Davin, 2013; Herrera, 2016; Mellom, Hixon, & Weber, 2019; Sedova, Salamounova, & Svaricek, 2014). Such researchers largely support their work by drawing upon sociocultural theory, which emphasizes that learning occurs when we interact with others, entertain multiple perspectives, synergistically create new ideas, and reflect on the success of our efforts; such interactions are especially key to creating a shared context for learning in classrooms where students bring varied cultural and historical backgrounds (Teemant, Wink, & Tyra, 2011). Hearing the perspectives of others who bring different worldviews provides both teachers and students with opportunities for epistemic friction (Medina, 2013). By acknowledging and engaging with diverse ways perceiving, thinking, and feeling, we are better able to “feel the contours of our social gaze” (Medina, 2013, p. 204).
Early proponents of using interaction with others to further learning and development include Dewey, Piaget, and Vygotsky. Vygotsky, as previously discussed, heavily emphasized the role that social exchanges play in an individual’s ability to make sense of the world. His concept of the ZPD has been foundational to teachers’ understanding of the pivotal functions of conversation and collaboration in learning (Vygotsky, 1978). Working within the ZPD requires that the learner be supported to achieve at higher levels by a more expert other, which oftentimes is the teacher or a more cognitively, academically, or linguistically capable peer (Herrera, 2016; Walqui & van Lier, 2010). By fostering and facilitating conversation, teachers provide students with opportunities to articulate personal experiences and their individual understandings of the content, which promotes their own learning and that of their peers. Teachers are in a unique position to create opportunities for conversation and to steer conversations in whatever directions they deem most valuable for advancing instruction to ensure individual and collective attainment of learning goals.

In the discussion to follow, the I explore conversation in K-12 classrooms as it occurs within teacher-initiated interactions. To a lesser degree, conversation in the context of student interaction is also discussed, as these peer interactions frequently are connected to and provide a basis for teacher-initiated talk. Social-emotional, linguistic, cognitive, and academic implications of both types of conversation for learners are highlighted.

Teacher-Initiated Conversation

Teacher-student interaction in the form of teacher-led talk or conversation has been widely researched (e.g., Applebee et al., 2003; de Oliveira & Athanases, 2017; Resnick et al., 2018; Saunders & Goldenberg 1999; Teemant et al., 2011; Tharp et al., 2000). Such interactions have been variously described in the literature with terms such as dialogic teaching, Accountable
Talk, ICs, and interactional scaffolding. The sections to follow briefly describe each of these pedagogical approaches to fostering classroom talk and maximizing it for student learning.

**Dialogic Teaching**

Dialogic teaching draws on Bakhtin’s (1981) concept of *dialogisation*, which requires a mixing of unique ideas from different people to yield change in mental perspectives. As individuals share their perspectives in a dialogic space, they are able to compare ideas and opinions (Sedova et al., 2014). Various terms have been used by authors to reference teaching that emphasizes dialogue. These include dialogic inquiry (Pappas et al., 2002; Wells, 1999), dialogical pedagogy (Skidmore, 2006), and dialogic teaching (Alexander, 2006). Among widely accepted indicators of dialogic teaching are those proposed by Applebee, Langer, Nystrand, and Gamoran (2003), which include:

- Authentic, open-ended questions that elicit students’ ideas and perspectives
- Coherence of dialogue made possible by uptake, the act of a speaker building upon what the previous speaker said
- Teacher feedback on student responses that goes beyond issues of correctness to elaborate on the content
- Open discussion that features a minimum of 30 seconds of connected talk involving at least three speakers building upon one another’s ideas

Other attributes proposed by researchers include the presence of exploratory talk (e.g., Mercer & Dawes, 2008; Boyd & Kong, 2017), in which learners make their reasoning and meaning-making processes public, and shared authority between students and the teacher for managing turns, asking questions, and so forth (Resnitskaya et al., 2009; Sedova et al., 2014). Authentic communication reflective of students engaged in meaning-making processes is the goal.
Empirical evidence illustrates the benefits of dialogic teaching for stimulating and sustaining science conceptual learning (Mason, 2001), developing metacognitive thinking (Daniel et al., 2005), and promoting argumentation skills (Resnitskaya et al., 2009). Although teachers tend to accept the premise and goals of dialogic teaching, it is relatively difficult to initiate and sustain (Sedova et al., 2014). Given that effectively implemented dialogic teaching is found in few classrooms, Sedova et al. (2014) suggest exploring embryonic forms of dialogic teaching among educators who, in contrast with theoretical ideals, must struggle with realities of required curricula and the limitations of their own skills. Even through imperfect enactments of dialogic teaching, teachers can still share power with learners, create space for students’ expression of ideas, foster connections between ideas, and so forth.

Accountable Talk

According to Resnick, Asterhan, and Clarke (2018), Accountable Talk is a teacher-led but student-owned process that centers around a complex problem that requires collaboration. Students think aloud about the problem, build off one another’s ideas (as well as those of the teacher), make claims and counter claims, question, and clarify. Accountable Talk comprises a set of techniques that highlight three interrelated dimensions: (1) accountability to the learning community, (2) accountability to knowledge, and (3) accountability to standards of reasoning (Michaels et al., 2008). Accountability to the learning community reflects the shared responsibility of the students and teacher to listen to one another, build and expand upon shared ideas, and contribute to the conversation. Accountability to knowledge emphasizes the need to have an accurate understanding of factual information, a goal that is furthered through classroom instruction. Accountability to standards of reasoning, on the other hand, reflects the reality that
not all conclusions are created equal. Some are more justifiable than others, based on available evidence.

Accountable Talk has been used with students of varied grade levels and across content areas to increase conceptual understanding and content knowledge, academic rigor, and the number and quality of peer interactions (e.g., Howell, Thomas, & Ardasheva, 2011; O’Connor, 2001; Richardson, 2010; Wolf, Crosson, & Resnick, 2005). However, most research conducted on Accountable Talk has been with native-English-speaking students; the academic outcomes of Accountable Talk for emergent bilinguals have been inconsistent (Ardasheva et al., 2016). For example, although research on Accountable Talk practices revealed a consistent association with literacy growth in a study reported by O’Day (2009), this positive effect was no longer statistically significant when considered in relation to only English learners. A possible hypothesis for this finding was that many English learners simply might not have had sufficient levels of English proficiency to comprehend the discussion and benefit from the provided opportunities for meaning construction.

According to Michaels and colleagues (2008), the most difficult facet of Accountable Talk to implement is often accountability to the learning community, as students respond in different ways based on having been socialized to different norms of conversation in their homes and communities. Learners well versed in Western educational norms are likely to find engaging in Accountable Talk relatively easy. By contrast, learners from other educational backgrounds are more likely to find the norms of Accountable Talk unfamiliar and, at times, in opposition to their community or home norms (Michaels et al., 2008). As a result, those learners who easily respond according to the norms of Accountable Talk can dominate the conversation, while other students respond haltingly, resist, or grow silent.
**Instructional Conversations**

ICs have a didactic focus and, like most other conversations, require that interactions be reciprocal. Generally, they involve the teacher responding back and forth with students in a dialogic fashion. The orchestration of conversations involves the skillful integration, or weaving together, of curricular concepts and skills, students’ background knowledge and experiences, and the emerging ideas of the learning community (Goldenberg, 1992-1993). Authors such as Goldenberg (Goldenberg, 1992-1993) and Herrera (2016) emphasize the human element in this process, reminding educators to attend carefully to student utterances in order to ensure responsiveness to learners’ efforts to express thought processes, share about their lives, make connections to the curriculum, use new language structures, defend their perspectives, and apply learning.

Studies have long provided empirical research supporting the effectiveness of using ICs to enhance the engagement and learning of K-12 students, including emergent bilinguals (Echevarria, 1995, 1996; Geisler, 1999; Olezza, 1999; Saunders & Goldenberg, 1999, 2007). Saunders and Goldenberg (1999), for example, explored student comprehension and writing. Their study, which was conducted with over 100 fourth- and fifth-grade students in a Spanish-English transition program, highlighted how ICs and literature logs can be used to support learning. Findings on story comprehension, understanding of story theme, and writing to explain and to exemplify that resulted from the study can be summarized by saying that, although both literacy strategies should be used, teachers who must pick one strategy should choose ICs.

In a meta-analysis conducted by Murphy and colleagues (2009), 42 quantitative studies on the effectiveness of nine different approaches to implementing group discussions about text were explored. Key outcomes under investigation were levels of teacher and student talk as well
as individual measures of student comprehension. Multiple approaches to discussion were found to reduce teacher talk and increase student talk while also yielding increases in text comprehension, especially for struggling learners. Efferent approaches (e.g., IC), which are directed toward retrieving and acquiring information from the text, yielded the greatest increase in student comprehension.

Given the multifaceted benefits of ICs, along with the increased presence of emergent bilinguals in U.S. classrooms (Herrera, Cabral, & Murry, 2020; National Education Association, 2015; New York University Steinhardt, 2018), many teachers strive to incorporate ICs in their repertoire of strategies. Yet, implementation of ICs can be more challenging than it initially might seem. Tharp and Gallimore (1991) attest that teachers do not use ICs to the extent that they should, and that teachers need training to implement ICs. They argue that, in addition to teachers needing a more elaborate set of skills, "they need to be conscious of their application" (p. 7). Engaging in ICs to promote classroom learning requires intentional, purposeful action.

To support high-quality instructional practices, the Center for Research on Education, Diversity and Excellence (CREDE) researchers articulated Instructional Conversation as one of the five Standards for Effective Pedagogy (CREDE, 2021; Tharp et al., 2000). The remaining four standards include: Joint Productive Activity, Contextualization, Language and Literacy Development, and Challenging Activities. When enacted in concert, the standards are designed to promote effective instruction for all learners. To facilitate coaching and teacher growth, CREDE researchers developed the Standards Performance Continuum (SPC). This instrument provides a scale with various levels of teacher performance for multiple indicators of each standard.
Examination of the SPC scale reveals at least two characteristics of ICs, as envisioned by CREDE. One notable characteristic is that ICs are intended to take place in the context of a teacher-directed small group of learners. Other students in the classroom are otherwise engaged while ICs occur. A second characteristic is that the teacher is expected to use questioning, rephrasing, and modeling to elicit student talk within conversation. Although much of the research surrounding ICs has taken place at the upper elementary level, this strategy has been used effectively with learners across varying age levels, content areas, cultural backgrounds, and levels of English proficiency (e.g., Hilberg et al., 2000; Padron & Waxman, 1999; Stoddart, 1999, 2005; Stoddart et al., 2002; Tharp & Dalton, 2007). Yet, challenges with implementing ICs in classroom practice remain. According to Teemant and colleagues (2011), Instructional Conversation was the least implemented of the five pedagogical standards among participating elementary teachers, despite professional development and coaching efforts.

Mellom et al. (2019) discuss how researchers at the Center for Latino Achievement and Success in Education (CLASE) have built on CREDE’s work to differentiate IC as a process (i.e., teaching through conversation) from IC as a thing (i.e., a teacher-facilitated small group event). In the CLASE model, the process is termed purposeful conversation. ICs, by contrast, are a specific type of joint productive activity (JPA). Mellom and colleagues define a JPA as students collaborating through conversation to achieve an instructional goal, resulting in development of a collective, tangible product. During independent JPAs, students function independent of teacher support and scaffold for one another. ICs, on the other hand, involve the teacher facilitating a small-group conversation with 3-7 students for the duration of the 20- to 30-minute lesson.
In the context of ICs, the teacher is able to foster relationships with students and hear how they are processing the content. The insights gained from time spent with the group enable more effective differentiation for the needs of individual learners. The teacher is able to address misconceptions, model language, reteach, dig deeper, offer corrective feedback, provide enrichment, and “push students through [the] ZPD” (Mellon et al., 2019, p. 137). ICs, like other JPAs, also foster community building and assessment.

Intent on keeping the entire classroom community engaged in learning through conversation, Herrera (2016) conceptualizes ICs as inclusive of teacher-student interactions that take place with the whole class as well as those that involve small groups of learners. Teachers frequently move between the two types of IC contexts, utilizing what students express and produce together in small teams to further the whole-class conversations. Herrera and colleagues at the Center for Intercultural and Multilingual Advocacy (CIMA) also built upon the work of CREDE researchers to adapt the SPC to more specifically target practices that promote language development of emergent bilinguals. The resulting Inventory of Situationally and Culturally Responsive Teaching (ISCRT) (MacDonald et al., 2013; Murry et al., 2015; Herrera, Perez et al., 2011) is used to facilitate teacher professional development and mentoring (see Appendix A).

**Interactional Scaffolding**

Interactional scaffolding is another type of teacher-student interaction. The basic concept of scaffolding relates to providing temporary supports to learners until they are able to undertake a task themselves (Bruner, 1978; Smagorinsky, 2018). Scaffolding generally involves breaking larger tasks into more manageable ones and using routines that incorporate graphic organizers, note-taking structures, questioning, and vocabulary work. Not all scaffolds can be uniformly applied to all students; knowledge of students’ assets and needs informs effective use (Herrera,
Planned scaffolds can also take the form of opportunities for students to collaboratively co-construct knowledge with peers, which allows learners to share background knowledge and build community (de Oliveira & Athanases, 2017).

Interactional scaffolding emphasizes the additional contingent and adaptive aspects of providing instruction (de Oliveira & Athanases, 2017). Herrera (2016) refers to such adaptive acts as *situational processes*, in which the teacher makes on-the-fly decisions about how best to support language acquisition and content learning. Decisions are based on observations of how students are responding to instruction in the moment. Through interactional scaffolding, teachers engage students in discourse that goes beyond initiation-response-evaluation patterns, with teachers providing feedback that moves the conversation forward (de Oliveira & Athanases, 2017). Teachers elicit student elaboration and strive to promote meaning making and higher-order thinking.

Interactional scaffolding frequently is used to support literacy and language development for emergent bilinguals. Teachers probe, prompt elaboration, and use verbal and gestural hints to support students’ use of language to express what they know and understand. They also highlight student efforts and emerging skills, providing encouragement and affirmation (de Oliveira & Athanases, 2017). More recently, de Oliveira, Jones, and Smith (2020) applied the scaffolding model of Hammond and Gibbons (2005) in their exploration of interactional scaffolding in a first-grade classroom. Teacher moves identified in the original model included linking to prior experiences and pointing to new experiences, recapping, appropriation, recasting, cued elicitation, and increasing the prospectiveness (i.e., eliciting extended student talk in the feedback move of an interaction-response-feedback sequence). Analysis of conversations in the focal first-grade classroom provided de Oliveira and colleagues with evidence of more fine-
grained moves that support increased prospectiveness: moving conversation forward, probing, elaboration, clarification, and purposeful repetition. The purpose of these moves centered on ensuring all students participated and engaged in extended use of the target language as they built genre-specific knowledge and skills.

Taken together, the multiple types of teacher-initiated conversation discussed in this chapter have implications for student learning and development. In the next section of this chapter, I summarize commonalities and distinguishing features in how these approaches to classroom conversation attend to the holistic student biography.

**Implications of Teacher-Initiated Conversation for Student Development**

Given the situated nature of development and experience, teachers’ expectations for students, especially for those who are culturally and linguistically diverse, and assumptions about the teaching and learning process can influence teacher-initiated interactions in a given classroom (de Oliveira & Athanases, 2017; Herrera, 2016). With this caveat in mind, the subsequent discussion explores the social-emotional, linguistic, cognitive, and academic implications of teacher-initiated interaction for students.

**Social-Emotional Implications of Teacher-Initiated Conversation**

Social and emotional development are furthered in numerous ways through teacher-initiated conversation. Social-emotional skills such as social awareness, relationship skills, self-awareness, and self-management are specifically targeted by the conversation-based instruction promoted by Mellom and colleagues (2019). These authors emphasize the need for educators to build social-emotional skills not separately from content instruction, but in the course of it. Norms for conversation are negotiated as a class. Considerations include multiple types of
norms, such as norms for a safe environment, speaking and listening, collaborative conversations, and controversial conversations.

Similarly, the Accountable Talk principle of accountability to community promotes student participation and motivation by communicating to all learners they are “valid and valuable contributors” in the development of the class’s collective understanding (Resnick et al., 2018, p. 20). Teachers develop this attitude in the classroom in multiple ways. They intentionally distribute responsibility and participation and prompt students to relate their ideas to those of their peers through their instructional moves. They further revoice student contributions and value errors in the process of coming to a deeper understanding of the content (Resnick et al., 2018). All of these actions serve to build up the classroom community.

Student affirmation and validation is a goal of both IC and interactional scaffolding practices in which the teacher purposefully makes connections to students’ background knowledge and experiences. One particular interactional scaffolding move highlighted for this purpose is “linking to prior experience;” de Oliveira and colleagues (2020) describe this move as moments in which teachers reference students’ experiences in and out of the classroom, including those that reflect their funds of knowledge. Herrera (2016) argues the need to first activate students’ background knowledge, conceptualized as a lifetime of learning and experiences from home (funds of knowledge), community (prior knowledge), and school (academic knowledge). Once students have documented this knowledge in relation to the lesson’s topic or key concepts and vocabulary, teachers can then more easily harvest ideas and language and incorporate them within the ICs (Herrera, 2016). This practice of taking student contributions and incorporating them into classroom discourse has also been termed “appropriation” among interactional scaffolding researchers (de Oliveira et al., 2020).
In dialogic classrooms where teachers seek to also disrupt typical teacher-student power relations, forms of participation, and types of support as they ensure relevance and responsiveness to students, teachers strive to create “third space” (e.g., Bhabha, 1994; Gutiérrez, 2008; Gutierrez et al., 1995). This space stands apart from the “official space,” which is focused on the curriculum and reflects the teacher’s Discourse (reflective of Gee’s 1990 concept). It also is distinguished from the “unofficial space,” which is characterized by students’ Discourse, background knowledge, and perspectives on the curriculum (Gutiérrez et al., 2003). In the third space, teachers and students engage in authentic interaction, jointly negotiating Discourse and constructing knowledge that incorporates their collective ideas, experiences, and expertise (Gutierrez et al., 1995; Gutierrez et al., 2003). More recently, Gutiérrez and Johnson (2017) emphasize that third space also creates opportunities for critical analysis of societal dynamics, attends to historicity, and makes possible the shared imagining and collective dreaming that fuels transformation toward social justice.

**Linguistic Implications of Teacher-Initiated Conversation**

Teacher-initiated interaction has significant implications for language learning. Approaches such as interactional scaffolding and ICs are especially suited to fostering students’ language development and metalinguistic knowledge. Mellom et al. (2019) provide multiple types of corrective feedback that teachers can incorporate into their ICs with students. Such types include modeling, clarification requests, paralingual signals (e.g., using body language to call attention to an error), repetition, recasts (i.e., embedded grammar corrections in revoicing), elicitations, explicit correction, and metalinguistic commentary. These instructional moves correlate with those promoted by interactional scaffolding (e.g., clarification, cued elicitation, purposeful repetition, recasting) (de Oliveira et al., 2020). To further scaffold students’
engagement in ICs, Herrera (2016) provides tools for learners to document the words and ideas most relevant to their learning. They then use the tools throughout the lesson to support their expression.

Use of the native language is also a distinctive aspect of ICs. Both Herrera (2016) and Mellom et al. (2019) emphasize that emergent bilinguals should be encouraged to use all their linguistic resources to support their learning. As previously described, the practice of employing all of one’s language resources is now commonly referred to as translanguaging (e.g., García, 2017; García et al., 2017). Herrera (2016) provides a significant level of detail regarding strategies and tools to support this process. Because students learn *through language*, their conceptual background knowledge and skills are anchored in the first language, or whichever language was used for prior instruction on a given topic. One of the key IC practices promoted by Herrera (2016) is teachers’ bridging of student talk and expression (including illustrations) to the target academic language.

Dialogic teaching and Accountable Talk benefit students most by fostering listening and speaking skills. For dialogue and Accountable Talk to occur, students must listen to the contributions of their peers in order to add onto the conversation and build upon the ideas of the previous speakers (Michaels et al., 2008; Applebee et al., 2003). Although skills needed for deliberative discourse are fostered through Accountable Talk (Michaels et al., 2008), this type of instruction provides little in the way of language support for emergent bilinguals. Similarly, dialogic teaching values voluntary participation of students in the exchange of ideas and perspectives (Sedova et al., 2014), yet scaffolding to support the engagement of emergent bilinguals was missing from the reviewed literature.
Cognitive Implications of Teacher-Initiated Conversation

Promoting students’ cognition and higher-order thinking is a major thrust of all teacher-initiated types of interaction highlighted in this chapter. De Oliveira and colleagues (2020) utilize multiple interactional scaffolding moves to promote student cognition. For example, *moving the conversation forward* is used to foster deeper thinking among the class, while probing is used with individual students to prompt expansion upon a previous response. By recapping, the teacher summarizes for the class the major takeaways of an interaction, thus supporting students’ overall comprehension of key points.

During the use of Accountable Talk, dialogic teaching, and ICs contextualized within joint productive activities, effective teachers provide challenging questions for the focus of the interaction (de Oliveira et al., 2020; Mellom et al., 2019; Resnick et al., 2018; Sedova et al., 2014; Tharp et al., 2000). Too simplistic of a question fails to encourage the sharing of multiple perspectives or provide the context for extended dialogue. It also does little to engender complex thought and makes developing hypotheses and claims unnecessary.

Accountability to standards of reasoning, one of the three facets of Accountable Talk, draws students’ attention to the logic and reasonableness of connections. Students must synthesize multiple sources of information and provide evidence to justify their claims and conclusions. Teacher moves such as marking important ideas, challenging students, and recapping or summarizing are employed during Accountable Talk to support evolving understandings and to spur students to dig deeper (Ardasheva et al., 2016).

Mellom and colleagues (2019) highlight the need for teachers to attend to the balance of task challenge and student competence during conversation-based instruction and ICs. The goal is to ensure students experience the empowerment, efficacy, and sense of hope characteristic of
productive struggle rather than the frustration and sense of inadequacy often associated with destructive struggle (Jackson & Lambert, 2010). Herrera (2016) further highlights the additional cognitive load for emergent bilinguals who are learning content through the use of the target language being acquired. Teachers must consider the degree of contextual support provided for a given task (e.g., conversation), as well as the degree to which the task is cognitively demanding (Cummins, 1981). Having hands-on scaffolds can support emergent bilinguals’ language production as they engage in ICs.

**Academic Implications of Teacher-Initiated Conversation**

Teacher-initiated interaction in the classroom benefits academic development for students by perpetuating a cycle of gathering information that is then used to differentiate and provide targeted support. This cycle is especially apparent in ICs. During ICs, teachers use questioning, discussion, and observation of students as they complete tasks to determine how learners are making sense of new information. With these insights, the teacher is able to adjust instruction as needed to support students’ attainment of the content and language learning goals (Herrera, 2016; Mellom et al., 2019).

Effectively executed Accountable Talk, through its focus on the facet of accountability to knowledge, prioritizes development of accurate conceptual understandings. Teachers guide learners toward correct understandings and draw upon authoritative knowledge, as necessary. The process of Accountable Talk also supports the teacher to determine where misconceptions or misunderstandings lie, so that these can be addressed during the course of the lesson (Michaels et al., 2008).

The crux of dialogic teaching is that it stimulates students to think deeply about the content as they engage in the reciprocal act of dialogue. Students develop authority as they share
responsibility for the quality and direction of the conversation (Resnitskaya et al., 2009). Students ask questions, manage turns, and suggest shifts in topics. With this increased level of ownership over the learning process, students develop more thorough academic understandings.

Interactional scaffolding is used in part to ensure that students, especially emergent bilinguals, have access to disciplinary challenges and goals that will support their academic achievement. Rather than water down the curriculum and focus on basic skills due to perceptions of what students are not yet able to do independently, teachers who use interactional scaffolding instead focus on what students can do. They are intent on providing students with high challenge and high support, which also includes use of previously described planned and routine supports (de Oliveira & Athanases, 2017).

Although teacher-initiated conversation plays a pivotal role in the classroom, learning is also fostered through multiple types of student-to-student interaction. The researcher next provides a brief overview of ways peer interaction opportunities are often incorporated within the classroom. Implications for student development are also discussed.

**Student Conversation through Peer Interaction**

A common way to increase the quantity of student talk in the classroom is to incorporate opportunities for learners to interact directly with one another. Herrera et al. (2017) use the mnemonic $i+TpsI$ to encompass the types of grouping structures predominantly used in the classroom. These include the individual student ($i$) prior to new learning, teacher-directed whole-group interactions ($T$), pair/partner work ($p$), small team interactions ($s$), and individual work for application and accountability ($I$). Although Herrera and colleagues posit that strategic use of each structure is key to facilitating development of language, conceptual understanding, and learning autonomy for CLD students, the use of small teams or groups takes center stage in most
literature surrounding student interaction. Two terms frequently used to describe student interaction within small groups are cooperative learning and collaborative learning, each of which derive from a constructivist view of knowledge (Panitz, 1999). I next differentiate the two types of group work and highlights the benefits of such interactions for students.

**Cooperation and Collaboration**

Cooperation and collaboration each refer to small group interaction that involves peers working together; however, the two types differ in process and underlying assumptions about the nature of learning. As defined by D. W. Johnson, R. T. Johnson, and Holubec (1994), cooperative learning is “the instructional use of small groups through which students work together to maximize their own and each other’s learning.” Cooperative learning is associated with the idea of different members of the group each having different roles (e.g., summarizer, recorder, timekeeper) (Johnson, Johnson & Holubec, 1991). Positive interdependence among group members is required for individuals and the larger group to succeed. The learning process involves both self-reflection and discussion on group processes. Cooperative learning stands in stark contrast to more competitive or individualistic learning experiences (D. W. Johnson, et al., 1994).

Collaborative learning similarly involves small groups of students working together. However, it reflects a more organic process in which all members of the group engage in a continuous, mutual effort to solve problems as a team (Janssen, Kirschner, Erkens, & Pass, 2010). Panitz (1999) argues that collaborative learning is less about teachers structuring the process correctly and more about trusting students to negotiate meaning together. He further differentiates the two processes by comparing the end results. During cooperative learning, students work together to accomplish a task for which there is a predetermined correct answer.
The process reflects a more teacher-centered approach. In contrast, students working together during relatively open-ended, collaborative learning tasks are likely to arrive at answers that are not entirely predictable. The collaborative learning process more heavily emphasizes a social constructivist perspective and, therefore, is more student centered.

Brody and Davidson (1998) pose questions that would likely be considered by teachers employing each form of student interaction. Questions that reflect the cooperative learning perspective include (p. 8):

1. How do we teach social skills?
2. How can we develop self-esteem, responsibility, and respect for others?
3. How does social status effect (sic) learning in small groups?
4. How do you promote problem solving and manage conflict?
5. Are extrinsic or intrinsic rewards more effective?
6. How can we prove that cooperative learning increases academic achievement?
7. How do we teach children to take on various roles?
8. How do we structure cooperative activities?

These questions reflect influences of social interdependence theory, behavioral learning theory, and cognitive-developmental theory (e.g., disequilibrium, cognitive reorganization) (Brody & Davidson, 1998; Johnson, Johnson, & Smith, 1998).

By contrast, questions posed by Brody and Davidson (1998) that reflect the collaborative learning process include (p. 8):

1. What is the purpose of the activity?
2. What is the importance of talk in learning?
3. To what extant (sic) is getting off topic a valuable learning experience?
4. How can we empower children to become autonomous learners?

5. What is the difference between using language to learn and learning to use language?

6. How can we negotiate relevant learning experiences with children?

7. How do we interact with students in such a way that we ask only real questions rather than those for which we already know the answers?

8. How can we use our awareness of the social nature of learning to create effective small group learning environments?

These questions revolve around the social nature of knowledge and reflect a greater degree of student empowerment and release of ownership to the group (Brody & Davidson, 1998; Panitz 1999). How teachers view the teaching and learning process will influence the type of group work they utilize most. Both cooperative learning and collaborative learning provide opportunities for students to be more active in the learning process. Specific benefits for learners are the topic of the discussion to follow.

**Implications of Peer Interaction for Student Development**

There are significant social-emotional, linguistic, cognitive, and academic implications of peer interaction for students. Although not intended to be exhaustive, the examples included in this section of the chapter provide an indication of the research and scholarship that have taken place across the last few decades.

**Social-Emotional Implications of Peer Interaction**

Opportunities for collaboration allow students to gain practice with real-time interpersonal communication (Mellom et al., 2019). In contrast to text or email conversations, face-to-face conversations require students to perceive and correctly interpret facial expressions, gestures, and other body language (Turkle, 2017). These social skills are essential to effective
communication with others, including success within teams both in school and beyond. Conversations in collaboration with diverse others also foster students’ ability to engage with alternative viewpoints (Resnick, Michaels, & O’Connor, 2010). The authentic dialogue and debate that often result as students negotiate solutions draws the learning experience closer to Habermas’s (1990) concept of deliberative democracy.

The social cohesion that results from working interdependently toward accomplishing a task fosters connectedness among members (Janssen et al., 2010). According to Johnson and Johnson (2009), promotive interaction reflects students’ efforts to support and encourage one another in the context of group work. Reflection upon the successes and challenges of group interactions can yield additional benefits. Group processing—in which students reflect on what went well and what did not—that incorporates individual feedback has been found to be more effective than group processing with whole-group feedback for increasing positive relationships among peers and between students and the teacher (Archer-Kath, Johnson, & Johnson, 1994). Such group processing also has a larger positive effect on self-esteem and positive attitudes toward the content area (Archer-Kath et al., 1994). Incorporating individual feedback provides students with opportunities to express their individual perspectives, which can inform future action on the part of the teacher to make necessary adjustments.

**Linguistic Implications of Peer Interaction**

Researchers regularly take into consideration the homogeneity/heterogeneity of skill levels represented by students involved in peer-mediated learning (Sabharwal, 2009; Pyle et al., 2017). Denessen, Veenman, Dobbelsteen, and Van Schilt (2008), for example, found that when medium-ability students partnered with low-ability students rather than high-ability students, they had more frequent opportunities to provide elaborate explanations. Different grouping
configurations can therefore influence the types of opportunities students have to practice language. When considering the language development goals of emergent bilinguals, collaborative learning must also account for dynamics surrounding the affective filter (Krashen, 1982), or students’ anxiety related to use of the target language.

Herrera (2016) recommends first having students share ideas with a partner before asking them to negotiate meaning and come to consensus in a small team. This additional step ensures English learners have a chance to first practice language and listen to their partner share ideas about the concept. They then are able to enter small group conversations with added confidence. When possible, teachers are encouraged to include at least one other speaker of the same native language within the small group of an emergent bilingual so that the same-language peers can support each other as they navigate language demands. Mellom and colleagues (2019) concur that having such opportunities to talk in lower-risk situations then increases the likelihood of students engaging in higher-risk, whole-group contexts.

**Cognitive Implications of Peer Interaction**

Learners use higher level reasoning strategies when they are influenced by positive interdependence (Johnson & Johnson, 2009). Knowing they are going to have to explain and summarize their learning to peers influences the type of strategies that students use and the way they conceptualize and organize information (Johnson & Johnson, 1991). When compared to independent work, cooperative group work results in increased regulation of thinking and reasoning, and these skills can then be transferred to individual learning contexts (Johnson & Johnson, 1991).

Students also challenge each other to higher levels of creative thinking and better decision making when they critique the reasoning and conclusions offered by group members.
The simple fact that students are able to share the intrinsic cognitive load (e.g., load related to the task itself) results in greater efficiency than if members had to complete the entire task without assistance. This holds true as long as the costs of group communication and coordination do not outweigh the benefits (Janssen et al., 2010).

**Academic Implications of Peer Interaction**

Positive goal interdependence promotes productivity and achievement (Johnson & Johnson, 2009). When students recognize that their performance influences the success of their peers, they increase their efforts to succeed. The process of orally summarizing and elaborating on ideas, information, and conclusions helps to solidify retention of understandings in long-term memory (Johnson & Johnson, 1991). Articulating one’s own understanding about the content is more strongly related to achievement than is listening to peers vocalize (Johnson, Johnson, Roy, & Zaidman, 1985). Thus, teachers must ensure that all students have sufficient opportunities to make thinking public (Herrera, 2016).

Mellom and colleagues (2019) acknowledge that some teachers are unnecessarily hesitant to have students work together, fearing they will inadvertently teach one another mistakes. This misconception, however, is not supported by research (Lightbrown & Spada, 2013). Instead, through their shared productive struggle, learners push each other toward greater clarity of thought and a more thorough understanding of the concepts as they justify their thinking with lived experiences and textual support (Mellom et al., 2019). In fact, the findings of a recent meta-analysis of different instructional practices reveal that consolidation of deep learning is best supported through collaboration (i.e., seeking help from peers) and discussion (Hattie & Donoghue, 2016).
Both teacher-initiated conversation and student conversation fostered through peer interaction can be maximized to facilitate the learning process. As discussed, students stand to gain multifaceted benefits from conversation-based practices. Youth who bring nondominant cultures and languages, however, find additional benefit when such practices are embedded in the larger context of classroom instruction that is relevant and responsive to their lived experiences and realities. In the next section of this chapter, I explore key innovations in pedagogical theory and practice that have been designed to more explicitly address the needs of CLD learners.

**Evolving Pedagogies for CLD Students**

Although the field, at large, has moved away from the banking model of education and toward a student-centered view of learning, there remains much to be learned about what an equitable, student-centered pedagogy for CLD and other students might look like in classroom practice. The diverse sociocultural, linguistic, cognitive, and academic assets that CLD students bring to the classroom are unlikely to be discovered, much less maximized to their fullest potential, if the teacher’s classroom pedagogy is mired in practices and perspectives that reflect a limited view of what “counts” (Herrera, 2016; Herrera & Murry, 2016). In this section of the chapter, I discuss instructional pedagogies that have been developed to more effectively leverage and sustain the cultures and languages of CLD students.

**Asset-Based Pedagogies**

Recognizing that U.S. classrooms and curricula historically have prioritized White, middle-class norms in teaching and learning (Alim & Paris, 2017), researching educators have strived to develop pedagogies and practices that increase the relevance of schooling for CLD students, with much foundational work taking place in the 1990s (e.g., E. Garcia, 1991; Moll &
According to categorizations provided by Paris (2012), many of these efforts can be described as resource pedagogies. Such pedagogies:

. . . repositioned the linguistic, cultural, and literate practices of poor communities—particularly poor communities of color—as resources to honor, explore, and extend in accessing Dominant American English (DAE) language and literacy skills and other White, middle-class dominant cultural norms of acting and being that are demanded in schools. (Paris, 2012, p. 94)

Instead of teachers viewing the languages, cultures, and literacies of students of color as detrimental or irrelevant to their academic achievement, resource pedagogies (also referred to as asset pedagogies in Paris and Alim, 2014) have guided educators to use students’ culturally situated skills and knowledge as a bridge to their development of capacities perceived essential to success. One of the most widely known asset pedagogies is culturally responsive teaching.

**Culturally Responsive Teaching**

In response to longstanding patterns of inadequate academic achievement among students of different ethnic groups, Gay (2000, 2010, 2018) developed *culturally responsive teaching* (CRT). Her intent was to move teachers away from deficit thinking that pathologizes students and their families to instead locate the problems within the institutional structures, assumptions, policies, and practices of classrooms, schools, and the larger society. CRT was designed to cultivate academic success while simultaneously fostering the cultural identity of ethnically diverse groups. It was developed to promote increased responsiveness of teachers to the lived realities of students. In this approach, Gay challenged educators to truly see, respect, and
leverage the skills, knowledge, and racial/cultural identities of their students in the learning process.

In short, CRT involves “using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2002, p. 106). It counters destructive, assimilationist practices of schooling (Gay, 2000). In her seminal work, Gay characterized CRT as (1) validating, (2) comprehensive, (3) multidimensional, (4) empowering, (5) transformative, and (6) emancipatory (Gay, 2000). CRT is validating in that it affirms students’ cultural heritages as central to the learner’s attitudes, dispositions, and approaches to learning as well as worthy of study. It builds bridges between students’ home experiences and realities and the academic experiences and abstractions of school. Educators incorporate multicultural resources, materials, and information into teaching of all subject areas.

In Gay’s view, CRT is comprehensive in that it is used to teach the whole child, encompassing intellectual, social, emotional, and political learning. Students work together to ensure all succeed. The communal, reciprocal, and interdependent nature of learning is emphasized. Within a classroom community of learners, students find belonging and are expected and supported to achieve academically, while also developing a critical social consciousness and capacities for political activism.

The multidimensional nature of CRT (Gay, 2000) takes into account factors such as the learning context, classroom climate, curriculum, instruction, student-teacher relationships, and assessments. Student-centered instruction prevails, with learners taking an active role in decisions that affect their learning (e.g., how performance will be evaluated). Emotions, opinions, feelings, values, and beliefs all play a part in the learning process. Students are held accountable for critical thinking, sharing, reflecting, feeling, and acting.
According to Gay, CRT is *empowering* because it fosters within students the belief that they can succeed academically. It also promotes the tenacity of learners to strive for mastery until it is achieved. Both individual and collective accomplishments are celebrated. CRT challenges students to take risks, and learners take up this challenge knowing they will be supported along the way by peers and the teacher.

CRT is *transformative* in two primary ways (Gay, 2000). First, it confronts and transcends the cultural hegemony insidiously embedded in the curriculum and instruction historically found in U.S. schools. Second, it prepares students to identify, challenge, and combat various types of oppression and exploitation, including racism.

Finally, CRT is *emancipatory* in that it is intellectually and psychologically liberating (Gay, 2000). When students are able to utilize their own ways of knowing, explore content that is relevant to their lives, and participate in practices that allow them to be producers of knowledge, they engage and achieve at higher levels. Through CRT, they develop greater pride in their cultural heritage, increased capacities to care for others, and greater awareness of the interconnectedness of individual, local, national, global, and human identities. Students no longer take knowledge at face value; rather, they question and critique as they consider possibilities for revision, reconstruction, and renewal.

More recently, Gay (2018) has expounded on the globalization of cultural responsiveness beyond pedagogy. She notes how it is now applied across diverse professional domains (e.g., health care, business, religion, social work, arts, politics) and in countries around the world. Yet, the foundations of CRT remain as relevant (if not more so) to today’s increasingly diverse world. Fostering the achievement of “ethnically, racially, culturally, and socially diverse students (e.g., students of color)” continues to be the primary goal (Gay, 2018, p. xxxii).
**Biography-Driven Instruction**

Building upon the foundation of CRT, researchers have called for an expanded view of CRT that would more directly address the needs of emergent bilinguals (Lucas & Villegas, 2010, 2013; Santamaria, 2009). Herrera (2010, 2016, 2022) addresses this need with *biography-driven* culturally responsive teaching. Referred to as biography-driven instruction (BDI), this communicative and cognitive method of instruction is designed to make the curriculum relevant, accessible, and rigorous for all students, especially emergent bilinguals. Teaching and learning with this method hinges on the previously described sociocultural, linguistic, cognitive, and academic dimensions of the CLD student biography. It also emphasizes making input comprehensible through hands-on activities/manipulatives (e.g., strategy tools), cooperative learning, guarded vocabulary, visuals, gestures, and body language (Herrera, 2016).

Lesson delivery with BDI can be conceptualized according to three phases: activation, connection, and affirmation (Herrera, 2016). During the *activation phase*, teachers provide learners with a low-risk opportunity to document initial connections to the topic, key concepts, or target vocabulary of the lesson. Students can utilize their full ranges of linguistic and conceptual resources. They are encouraged to draw or use any language they desire (i.e., engage in translanguaging). During this initial phase of the lesson, teachers observe for insights into students’ background knowledge, which reflects their funds of knowledge (home), prior knowledge (community), and academic knowledge (school) (Herrera, 2016). They may inquire about a student’s rationale for a specific response in order to better understand the schemas the learner is using to make sense of the information. Students typically have opportunities to discuss with a partner or small group their initial associations and predictions; they are encouraged to borrow words and ideas, as desired (Herrera et al., 2017). If teachers strategically
listen to what learners are saying (reflective of situational awareness), these conversations further inform their understanding of students’ existing knowledge, skills, and connections.

The connection phase of BDI (Herrera, 2016) encompasses teacher-directed, text-based instruction as well as all the activities the teacher uses to make the curriculum come alive. When implementing BDI, teachers commonly employ BDI strategies (see Herrera et al., 2017; Herrera, Kavimandan, & Holmes, 2011). These instructional strategies provide a through-line for instruction, setting the stage for learning in the activation phase and then supporting students’ evolving understanding and practice with concepts and language throughout the remainder of the lesson. The strategies typically include hands-on tools (i.e., mediation tools) that students use to document and scaffold their learning.

During the connection phase, students are provided with challenging tasks and activities that stretch their thinking to new levels. The teacher facilitates language development and conceptual understanding by creating purposeful opportunities for learners to collaborate in pairs and small groups. These conversations—as well as the words, ideas, and images that students record on their strategy tools—foster distributed cognition (Hutchins, 1995), illustrate the distributed expertise (Brown & Campione, 1996) of the classroom community, and offer the teacher valuable formative assessment data. Teachers use instructional conversations to revoice students’ responses and highlight how their ways of thinking contribute to the learning of the entire class (Herrera, 2016).

The affirmation phase of the lesson allows teachers to check for understanding and attainment of the learning goals (Herrera, 2016). Teachers provide opportunities for students to apply their new learning as they confirm/disconfirm the predictions and associations they documented in the initial affirmation phase. Students are guided to use the words and concepts
explored during the lesson to complete post-instructional tasks that typically involve writing. The individualized strategy tools developed throughout the lesson serve to scaffold student success. Students often have additional opportunities to use their developing language skills to share their finished products with peers.

The affirmation phase is so named because teachers take time during this closing portion of the lesson to celebrate the accomplishments of individuals and of the whole group. Both achievement and incremental progress are valued and affirmed. Teachers also provide feedback that allows students to see where they still need to refine their understandings. Rather than being perceived in punitive ways, errors simply mark the path forward (Herrera, 2016).

Research on BDI has shed light on the impact of this pedagogy for teachers and students in U.S. classrooms. Pérez, Holmes, Miller, and Fanning (2012), for example, found that both elementary and secondary teachers demonstrated increased use of effective pedagogical practices, including instructional conversations, when implementing a BDI strategy. Findings further revealed that the significant gap in effectiveness between teachers of different grade levels—with elementary teachers outperforming secondary teachers—was eliminated when BDI strategies were employed. MacDonald, Miller, Murry, Herrera, and Spears (2013) similarly investigated applications of BDI strategies at both elementary and secondary school levels; however, MacDonald and colleagues focused exclusively on math and science teaching. Findings indicated that teachers in both content areas demonstrated higher levels of CRT when using a BDI strategy, with science teachers outperforming math teachers.

Research has also explored the impact of university-delivered professional development designed to increase teachers’ capacities for BDI implementation. Herrera, Holmes, and Kavimandan (2012), for example, documented the outcomes of professional development for
175 secondary-level language arts, social studies, and STEM teachers. Statistically large effect sizes were found between teachers not involved in coursework, those taking courses, and those implementing a BDI strategy. Effects associated with coursework and strategies remained consistent across content areas. Murry and colleagues (2015) investigated the effects of four semesters of university coursework, which emphasized principles and practices of BDI, on the demonstrated instructional effectiveness of more than 100 elementary, middle, and high school teachers. The ISCRT classroom observation tool (see Appendix A) was used to explore implementation of CREDE standards (i.e., Joint Productive Activity, Language and Literacy Development, Contextualization, Challenging Activities, and Instructional Conversation) with specific attention to dynamics of learning for emergent bilinguals. Findings indicated significant growth among teachers across all five areas, with the greatest increases in effectiveness for joint productive activity, instructional conversation, and challenging activities. When examining teacher practices related to each of the component ISCRT indicators, participants were found to have significantly improved performance on 18 of the 22 indicators.

A growing body of qualitative research has demonstrated the effectiveness of BDI in elementary classrooms. For example, Holmes, Kavimandan, and Herrera (2018) explored the perspectives of 16 elementary teachers regarding instructional benefits of systematic implementation of BDI strategies, outcomes of interaction opportunities, benefits for students, and changes in teachers’ meaning perspectives. Perceived instructional benefits related to activating student ideas, promoting student engagement, and providing differentiated support. Classroom interaction fostered students’ language development, academic self-concept, and multiple ways of knowing. Students were perceived to develop confidence to excel and higher-order thinking, with academic gains also evident. Teachers became more student centered in
their instructional practices and realized students were more capable than they initially thought. The findings of additional studies (e.g., Murry et al., 2020, 2021) substantiate the perceived benefits of BDI for student engagement, meaningful use of the target language (English), and academic achievement, while also highlighting the role of BDI in building community and creating a positive learning environment.

Despite the many positive outcomes of asset pedagogies, researchers such as Paris and Alim (2014) have challenged those in the field of education to take a critical look at how implementation has frequently fallen short of achieving some of the goals of the pedagogies as initially conceived. For this reason, they have argued for applications of culturally sustaining pedagogies, which are the focus of the next section of this chapter.

**Culturally Sustaining Pedagogies**

Culturally sustaining pedagogy (CSP) (Paris, 2012) builds upon the foundation of culturally relevant pedagogy (CRP) (Ladson-Billings, 1994, 1995), another asset pedagogy. As Ladson-Billings (2017) summarizes, CRP fosters student learning, development of cultural competence, and critical consciousness. She reminds educators that learning is more expansive than that which can be measured by standardized assessments; culture encompasses more than tangible and visible artifacts, customs, and foods; and critical consciousness cannot simply be ignored. CRP has been widely used in the field of education for more than two decades.

In his seminal work on CSP, Paris (2012) delineates the intent behind the pedagogy and explains why he feels that it is necessary to take CRP to the next level. According to Paris, “Culturally sustaining pedagogy seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of the democratic project of schooling” (2012, p. 93). In Paris’s view, words like “relevant” and “responsive” do not go far enough to state the intended outcome
of equity focused pedagogies: sustaining the heritage and community linguistic and cultural practices of students and families.

While CRP asks teachers to leverage students’ skills toward academic achievement, Paris (2012) asks them to reconsider the purpose of schooling in a pluralistic society. He prompts educators to consider the hegemonic effects of typical schooling practices. With CSP, a key goal is for students to develop linguistic and cultural dexterity and plurality. These skills are necessary for success in our increasingly multilingual and multicultural world, where learners will need to be able to function effectively using a variety of language practices in multiethnic contexts.

Paris responds to the CRP goal of developing cultural competence by questioning whether educators consider the varied and constantly shifting cultural practices of today’s youth. The common tendency is for teachers to view cultural practices in a static way, despite generational differences and changes that occur simply by cultures being lived across time and place. As a descriptor, heritage and community practices (Paris, 2012) better reflects the realities of dynamic cultures.

Paris also questions the degree to which research and practice related to resource pedagogies such as CRP are actually creating a critical stance toward unequal power, much less critical action. Resistance to schooling designed to foster a monocultural and monolingual society based on White, middle-class norms is needed. Schooling, he insists, must instead be used to actually create the kind of pluralistic society that the United States has long espoused. Rather than delineate specific CSP practices for teachers to implement, Paris (2012) uses the plural—culturally responsive pedagogies—and through this article encourages researchers and educators to engage with this line of work.
Building on the arguments provided in Paris (2012), Paris and Alim (2014) ask educators to consider: “What if, indeed, the goal of teaching and learning with youth of color was not ultimately to see how closely students could perform White middle-class norms but to explore, honor, extend, and, at times, problematize their heritage and community practices?” (p. 86). Paris and Alim point to the importance of sustaining heritage and community practices because they are worthy of sustaining in their own right. Beyond being valuable to individual communities, they are valuable to all students in that they provide a more pluralistic perspective for understanding and interacting with others. Such a perspective, they argue, will be essential for access to power in a country that grows increasingly more diverse.

Paris and Alim (2014) connect CSP to the work of building a more socially just world. For this reason, they also discuss the need to analyze and critique even the cultural and community practices that serve to sustain youth. For example, they suggest that the misogynistic, sexist, and homophobic elements in some Hip Hop should not simply be ignored; nor should they be cause for teachers to avoid incorporating Hip Hop as a focus of study. Rather, students should be guided to interrogate the practices they engage in and to foster more inclusive, pluralistic discourses. As Tricia Rose, cited by Alim and Paris (2017), notes: “to love something is not to affirm it all the time; we need transformational love” (p. 11). Alim and Paris (2017) also make clear that “damaging discourses are present across all cultural communities and practices” (p. 11). The job of educators, then, is to support learners to think critically about cultural practices in order to build on positive aspects as well as acknowledge and strive to transform negative aspects.

Other scholars, such as Bucholtz, Casillas, and Lee (2017), have used CSP to highlight ways language practices of youth (e.g., Spanglish and language brokering) can be centered and
used to encourage students’ pride in their identities. Rosa and Flores (2017) also focus on language development among emergent bilinguals and heritage language learners, naming and problematizing the oftentimes raciolinguistic ideologies used by listeners to link racialized persons with deficient linguistic practices, regardless of the empirical nature of those practices. Rosa and Flores contrast such perceptions with those likely to be applied to White speakers who are learning a foreign language. Other researchers have variously applied CSP to their work with students of different ethnic groups (see, for example, Lee and McCarty’s (2017) discussion of culturally revitalizing pedagogy in Native American contexts). Across contexts, CSP speaks to the need for classroom ecologies to become safe places for students to examine the complex, nuanced, and conflicting realities of their own lives and the world around them. In the subsequent discussion, I bring together both strands of justice-oriented pedagogies (asset based and culturally sustaining) to illustrate how existing theoretical constructs can be leveraged together in classroom practice.

The Need for Biography-Driven, Culturally Responsive/Sustaining Ecologies

Both asset-based pedagogies and the more critical culturally sustaining pedagogies seek to legitimize CLD students’ knowledge. The cultural experiences of learners are more than just ornaments to be added to a White-washed, universalized notion of background knowledge. Rather, as discussed previously in this chapter, students’ cultures and languages inform the way they attend to, perceive, interpret, interact, and communicate in the world, including the classroom (Vygotsky, 1978). Given the diversity of classrooms today, teacher pedagogies must be flexible enough to ensure responsiveness to the individual worldviews of each learner.

BDI offers distinct advantages for teachers in highly diverse classrooms who strive to respond to students’ individual assets and needs. The CLD student biography, and related
biopsychosocial history, provides a theoretical frame to support information gathering for instructional differentiation. Through the activation phase, BDI highlights the surfacing of memories, knowledge, practices, and skills tied to students’ knowledge systems. Discovering insights into students’ funds of knowledge (home), prior knowledge (community), and academic knowledge (school) is instrumental to teachers’ ability to sustain learners’ cultures, languages, and literacies throughout the remainder of the learning process (e.g., connection and affirmation phases). As Holmes and Herrera (2021) assert, educators cannot sustain something until they know it is there.

Teacher actions set the stage for the classroom ecology, which provides the context for (and is simultaneously created by) reciprocal actions between students and teachers (Herrera, 2016). The types of student-teacher and peer interactions that serve to mediate learning are influenced by conditional (planned) and situational (in-the-moment) processes of teaching (Herrera, 2016). Both types of processes are evidenced within ICs that BDI teachers use to foster learning of the classroom community.

Yet many questions remain about the nature of such conversations. For example, how do teachers use ICs to foster trusting relationships with CLD students? In what ways do teachers elicit connections to students’ ways of knowing? How do teachers use ICs to promote a sense of classroom belonging for CLD students? Although research has expressly focused on conversational moves used to promote linguistic, cognitive, and academic development (e.g., those germane to interactional scaffolding), no research was identified that focused expressly on discourse targeting connections to the sociocultural dimension. This gap in the literature is significant, considering the importance of the sociocultural dimension for students’ individual
development (Vygotsky, 1978) and for teachers’ enactment of culturally responsive/sustaining pedagogies.

In this study, I sought to address this gap in the literature by exploring the overarching research question: *In what ways do grade-level BDI teachers use ICs to create culturally responsive/sustaining classroom ecologies?* To support this investigation, I utilized a composite theoretical framework that brought together aspects of sociocultural theory, BDI, and CSP that are pivotal to the holistic development of emergent bilinguals (see Figure 2.1). With a greater awareness and understanding of students’ continually evolving identities and ever-accumulating lived experiences, teachers are positioned to engage learners in culturally responsive/sustaining ways.

**Summary**

In this chapter, I reviewed the literature that supported my development of the study. I summarized demographic trends reflected in the U.S. student population, as well as current opportunity gaps that exist for CLD learners. I explored sociocultural theory that provided a foundation for this study’s focus on classroom interaction. I discussed the role of discourse communities in influencing the identity and worldview of teachers and students, who also together create a shared discourse community.

Next, I delved into ways to understand CLD learners from a holistic, asset-based perspective. With this orientation to student diversity in mind, I discussed teaching and learning within the social context of the classroom, highlighting multiple ways conversation has been used as an instructional tool to advance student understanding and development. I subsequently discussed pedagogies designed especially for CLD students and concluded the chapter with a description of the composite theoretical framework for this study.
In Chapter 3, I provide an overview of the discourse analysis methodology that was used to explore the research question and sub-questions of this study. I detail the methods, including data collection processes. I also summarize the data analysis procedures that were used to produce findings that directly address the research questions.
Figure 2.1. Culturally Responsive/Sustaining Classroom Ecologies
Chapter 3 - Methodology

In this study, I explored the interactional dynamics between teachers and students in grade-level, CLD classrooms. Specifically, I investigated ways in which elementary teachers who employ BDI (e.g., Herrera, 2016) use discourse to invite and nurture student willingness to share about and maximize the sociocultural and linguistic dimensions of their biographies. The research question and sub-questions that guided this study were: In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?

1. What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?

2. In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?

3. What institutional factors challenge and support culturally responsive/sustaining discourse practices?

In this chapter, I discuss the methodology that I used to explore the answers to the research questions. I first situate the discourse analysis methodology within the larger methodological framework of the study, which includes my chosen epistemology and theoretical perspective. After describing the methodology, I then discuss the methods of this investigation. I provide information about the context, my subjectivity, the site and sample, and the procedures related to informed consent and assurances of confidentiality. Next, I detail the methods of data collection and analysis. I additionally discuss the credibility of the research.
Methodological Framework

The following sections of this chapter provide insight into the way I view reality, knowledge, and meaning making. These perspectives provided the foundation for my approach to this study. I then detail the design I used as I pursued answers to the research questions.

Epistemology

Epistemology comes from the Greek words epistēmē (“knowledge”) and logos (“reason”) and can be defined as the philosophical study of the origin, nature, and limits of human knowledge (Martinich & Stroll, 2021). According to Martinich and Stroll (2021), efforts to understand the world in an epistemological sense have been a focus of Western philosophy dating back to the ancient Greeks. Epistemology continues to have relevance today, especially with regard to research. As Crotty (1998) so aptly reflects, the way one researches the world is shaped by the way she or he views the world. The perspectives of reality held by study participants—as well as my own—are informed by inherited knowledge and constructed through interactions with others and with the physical world. These socially constructed understandings reflect a constructionist epistemology (Bhattacharya, 2017; Crotty, 1998), and they provide the basis for individual perceptions of meaningful reality and truth.

Constructionism, according to Crotty (1998), is the viewpoint that “all knowledge, and therefore all meaningful reality as such, is contingent upon the human practices, being constructed in an out of interaction between human beings and their world, and developed and transmitted within an essentially social context” (p. 42). When considering reality, the word “meaningful” is key. This stance does not suggest that the world without humans would have no substance; rather, it reflects the idea that a human mind is needed to create an understanding of
that substance (e.g., as having a specific purpose, defining features) (Crotty, 1998; Humphrey, 1993).

Crotty’s definition of constructionism further highlights the central notion that meaning results from humans in interaction with the world around them. It suggests the subject (the knower) and the object (that which is to be known) are intertwined. The subject brings her curiosity and creativity to bear on the object; the object itself makes possible and yet also constrains the meaning that results (Crotty, 1998). Another pivotal idea embedded in this description of constructionism is that the meanings generated by human beings emerge in the context of shared practices. Such practices incorporate thought and behavior that not only are influenced by a given culture, but also serve to constitute that culture (Geertz, 1973).

Constructionism reflects my own view of reality and provided the basis for the social research that I conducted. The ways teachers engaged in meaning-making practices with learners, in the historical and cultural context of the U.S. educational institution, was the focus of this study. Moreover, the culturally influenced ways of knowing that teachers and learners bring to classrooms present a kaleidoscope of possibility for the shared BDI practices of the classroom learning community. The discourse I explored documented (at least partially) how teachers and students interacted with one another and with the physical world around them to increasingly understand and construe reality.

**Theoretical Perspective**

Interpretivism, as a theoretical paradigm, is situated within the constructionist epistemology. This paradigm prioritizes patterns of interaction as well as the interpretive processes people use to make meaning in relation to situations, events, and so on (Leavy, 2017). The primary goal of interpretivist research is to develop an in-depth understanding of
participants’ unique perspectives on their experiences (Bhattacharya, 2017). Interpretivism is oriented toward explorations of “culturally derived and historically situated interpretations of the social life-world [emphasis in original]” (Crotty, 1998, p. 67).

Taylor and Medina (2013) characterize interpretivism as a relatively new paradigm in educational research, one that came into use in the late 1970s. When discussing the benefits of interpretivism in relation to education, Taylor and Medina explain, “. . . this paradigm enables researchers to build rich local understandings of the life-world experiences of teachers and students and of the cultures of classrooms, schools and the communities they serve” (Relatively New Paradigms section, para. 1). To develop such thorough understandings, which reflect the larger purpose of interpretivism, researchers strive to comprehend the participants’ perspectives by learning to see things through their eyes (Taylor & Medina, 2013).

Despite variations among researchers’ perspectives on interpretivism, the primary tenets remain constant. According to this paradigm, for example, there are multiple realities because reality is subjective and is based on an individual’s unique interpretation of his or her experiences (Mack, 2010). Moreover, a single event can be interpreted in multiple ways, and each person’s perspective is influenced by her or his cultural and historical context (Crotty, 1998; Mack, 2010). The interpretivist theoretical framework was ideal for this study because the research centered on developing in-depth understandings of teachers’ life-world experiences situated within (and simultaneously creating) the context and discourse of their classroom cultures, as expressed through their ICs. Such a framework also supported exploration of teachers’ perspectives on institutional factors that influence their enactment of ICs designed to foster culturally responsive/sustaining ecologies.
Methodology

The methodology that allowed me to gain insight into BDI teachers’ interpretations of their interactions with students during ICs was qualitative in nature. A qualitative design is appropriate when interpretation and descriptions resulting from discovery, analysis, and insight are intended outcomes (Creswell, 2014). Qualitative research allows researchers to understand, interrogate, or deconstruct (Bhattacharya, 2017). In this study, I sought to understand how teachers used discourse as they engaged in ICs with diverse communities of learners. My constructionist epistemology provided the foundation for this qualitative design, through which I explored the meanings generated by teachers as they interacted with learners in the context of shared classroom practices.

To explore the classroom discourse of participating teachers, I utilized discourse analysis. Discourse has been defined in a multitude of ways. It is often referred to among linguists as “language-in-use” (Gee, 2014, p. 19). It can be characterized as including numerous genres or forms, including conversations, classroom lessons, visual images, meetings, speeches, policies, textbooks, letters, film, multimedia, nonverbal communication, and more (Mullet, 2018). Within the context of this study, the ICs within BDI lessons were the focal from of discourse. To emphasize the numerous ways in which individuals make meaning, Fairclough and colleagues refer to discourse, at the most general level, as *semiosis*. They argue that using this term allows for consideration of multiple semiotic modalities, including language, body language, and visual images (Chouliaraki & Fairclough, 1999; Fairclough, 2001; Fairclough et al., 2004). Both language and body language were explored in this study as I interpreted and explained how teachers and students together made meaning in BDI classrooms.
Regardless of the form or modality it takes, discourse is seen as a social practice, situated within its particular context of use (Bartlett, 2012). Bartlett (2012) argues that any spoken or written text can be analyzed for the formal progression and coherence it displays and for its linguistic features; yet, without attending to context, “such an analysis would tacitly assume that the text was created in a social vacuum and that it means the same thing to all people” (p. 9). Such is not the case. Rather, as Bartlett explains, the speakers of the text, their audiences, and the words themselves, all have social histories. Therefore, it is the placing of text within its social and historical context that makes it discourse. In this study, I contextualized the IC discourse for the reader by specifically attending to the social context and social practices that provided the backdrop for the exchanges.

Language is never devoid of context. It is used by particular people, at a particular point in time, in particular situations, within particular contexts, and for particular purposes. The degree to which the historical and social context is explored in relation to the written or spoken text varies among research traditions (Markee, 2015; Wodak & Meyer, 2016). A wide variety of fields/paradigms/linguistic subdisciplines, including semiotics, ethnography of speaking, psycho- and sociolinguistics, pragmatics, discourse studies, and conversation analysis, make up the general field of discourse studies (Wodak & Meyer, 2016). Wodak and Meyer explain that despite the variation within the field, discourse studies have numerous dimensions in common. For example, researchers engaging in discourse studies explore the properties of language as it naturally occurs. They focus on larger units of analysis than isolated words and sentences, looking instead to conversations, text, discourses, communicative events, or speech acts. They investigate action and interaction, thereby extending linguistic analysis beyond sentence grammar (Wodak & Meyer, 2016).
In the current study, I explored the naturally occurring ICs that took place in BDI classrooms. These largely spoken texts reflected discourse used by teachers and students within the context of daily, grade-level lessons. The actions and interactions that occurred had a linguistic component, yet this linguistic component also pointed to (and was made comprehensibly by) the larger social and cultural practices in motion. Wodak and Meyer (2016) also noted that studies in this area investigate dynamic moves and strategies, as well as functions of the contexts (social, situative, cultural, and cognitive) in which the language is used. Because teachers commonly use ICs to support learners’ understanding of the content—employing and orchestrating such conversations in response to what students produce (Herrera, 2016) — I anticipated that the cognitive and situative function of the context would influence the nature of the discourse that took shape.

The current study explored discourse from a positive discourse analysis (PDA) perspective. PDA evolved from Critical Discourse Studies, also referred to as Critical Discourse Analysis. To provide readers with necessary context, I now turn my attention to this critical type of discourse analysis.

**Critical Discourse Analysis**

Critical Discourse Analysis (CDA) began in the late 1980s and has diverse roots in text linguistics, rhetoric, applied linguistics, pragmatics, anthropology, social psychology, sociolinguistics, philosophy, cognitive science, and literary studies (Wodak, 2013; Wodak & Meyer, 2016). It builds upon the foundational commonalities of discourse studies (Wodak & Meyer, 2016), many of which were described above. However, those who approach discourse from a critical perspective see it from a “language as social practice” lens (Fairclough, 1995;
Fairclough & Wodak, 1997). This lens was especially relevant to the current study, as ICs reflect language use within a specific type of social interaction commonly found in BDI classrooms.

In contrast to discourse studies, critical discourse studies are fundamentally problem-oriented. They are used to understand, explain, and analyze complex social phenomena (Fairclough, 1992). CDA applies critical analysis of social elements (e.g., ideologies, institutions, power relations, social identities) to studies of language (Fairclough, 2013). For instance, critical discourse analysts generally seek to investigate, make visible, and explain the ways power and discriminatory beliefs and values are “inscribed and mediated” through language (Caldas-Coulthard & Coulthard, 1996, p. xi).

Power can be enacted, for example, by controlling discourse through indirect means (e.g., turn-taking, properties of syntax, rhetoric), through linguistic surface structures (e.g., pauses, laughter, tone, forms of address, hesitation), or by controlling the context (e.g., meeting with families only in the context of on-site parent-teacher conferences) (Mullet, 2018). Discourses can also be used to deny inequalities or justify them, through complementary strategies that reflect negative representations of “Others” and positive representations of one’s own group (van Dijk, 1993, p. 263). According to van Dijk (2013), being critical in this sense can be thought of as a state a mind, a way of dissenting, an attitude of opposition, and so forth. BDI provides educators with a practical method for disrupting oppressive ideologies and teacher-student power relations that are typical of educational institutions (Gutiérrez & Johnson, 2017; Herrera, 2022). Social identities also are of particular importance to teachers’ culturally responsive/sustaining interactions with CLD students (Herrera, 2016; Paris & Alim, 2014).

As articulated by Fairclough, “Discourse is a practice not just of representing the world, but of signifying the world, constituting and constructing the world in meaning” (1992, p. 64). It
is from this line of thought that discourse is considered socially constitutive. Individuals use discourse to act upon the world, and in particular upon each other. Discourse thus can be viewed as a mode of action. This constructive action can contribute to the creation of social identities, social relationships between people, and systems of knowledge and beliefs (Fairclough, 1992). An emphasis on using language to construct social identities, build relationships, and create systems of knowledge—especially systems intentionally inclusive of CLD students’ ways of knowing—is inherent to the type of pedagogy promoted through BDI and CSP (Herrera, 2016; Paris & Alim, 2014).

CDA also goes beyond simply describing realities to evaluate how they relate to values fundamental to socially just societies, especially with regard to material, cultural, and political standards of human wellbeing (which may be contested to a greater or lesser degree). It further explains how forces, structures, or mechanisms create the focal injustices, as exemplified through the researcher’s analysis (Fairclough, 2013). From Fairclough’s (2013) perspective, this Marxist approach of first explaining how the current state of affairs came to exist is essential to efforts to change the world for the better. Fairclough (1992) emphasizes that although social structures (e.g., social class, institutions, discursive norms and conventions, systems of classification) shape and constrain discourse, participants can also exercise their own agency, through discourse, to act upon those same social structures. In the case of BDI, for instance, teachers use their individual agency to create more democratic, liberatory spaces (Herrera, 2022). In this way, they challenge the discursive norms of educational institutions, especially with regard to classroom interactions among teachers and learners. The intent of this study was to explore how this agency takes shape in the IC discourse of CLD classrooms.
According to Caldas-Coulthard and Coulthard (1996), “Critical Discourse Analysis is essentially political in intent with its practitioners acting upon the world in order to transform it and thereby help create a world where people are not discriminated against because of sex, colour, creed, age or social class” (xi). This study extended desired transformation to discrimination based on culture (e.g., ethnicity) and language. The view of Caldas-Coulthard and Coulthard (1996) resonates with many CDA researchers, who see the very act of engaging in CDA as political (Hughes, 2018; Rogers & Schaenen, 2014). Yet, CDA has been criticized for failing to more fully actualize this social reconstruction potential (Martin, 2004). CDA work has often prioritized explicating how injustices in society are instantiated in and through language (Hughes, 2018). Kress (2000) discusses how this focus on identifying past failings, though needed, results in inertia with regard to social change. He argues that researchers need to place additional energy on forward-thinking processes, on identifying and harnessing the means and resources to design a more socially just future. The current study was an effort to address this need in the field.

Bloome and Talwalkar (1997) were among the first to call for a shift in focus from a deconstructive to a reconstructive approach, in which the generative potential of power is emphasized. In the words of Bloome and Talwalkar (1997),

Equitable and democratic (re)distribution of power is not just a matter of resistance to imposition or of a new set or group of people exercising control over others, rather the reconstruction of social life (or at least components of social life). (p. 111)

Bloom and Talwalkar draw parallels to the work of Noddings (1984), as she asserts the value of power with rather than power over. Foucault (1980) also maintained that power was not solely an oppressive force, arguing that power “traverses and produces things, it induces pleasure, forms
knowledge, produces discourse. It needs to be considered as a productive network which runs through the whole social body” (p. 119). Studies vary, therefore, by the degree to which the analyst centers on issues of hegemony, resistance, or reconstruction (Rogers & Schaenen, 2014). Moreover, an intentional emphasis on using critical discourse for reconstructive purposes, as in the case of this study, has resulted in the emergence of Positive Discourse Analysis.

**Positive Discourse Analysis**

As Fairclough (1989) reminds, hegemonic dynamics are not absolute; rather, there is an ongoing struggle for power that depends on acquiescence and consent. It is, therefore, possible to disrupt such dynamics and instead bring to light alternative ways of interacting. Martin (1999) was first to propose the term PDA to identify efforts within CDA that focus specifically on the transformative uses of language to disrupt oppressive systems and practices. The emergence of this vein of research highlights the significance of these lines:

> If discourse analysts are serious about wanting to use their work to enact social change, then they will have to broaden their coverage to include discourse of this kind – discourse that inspires, encourages, heartens; discourse we like, that cheers us along. We need, in other words, more positive discourse analysis (PDA?) alongside our critique; and this means dealing with texts we admire, alongside those we dislike and try to expose” (Martin, 1999, pp. 51-52).

Heartening discourse that inspires change illustrates for others what is possible. PDA has been likened to “the search for new stories to live by” (Stibbe, 2018, p. 170). It offers the complement to CDA work emphasizing asymmetries of power and hegemonic, oppressive forces that analysts commonly seek to resist (Hughes, 2018; Luke, 1995; Rogers & Schaenen, 2014). As described by Rogers and Wetzel (2013), this positive turn shifts the focus toward research that explores
“moments of hope, agency, and liberation” (p. 88). PDA was an ideal fit for the current study, in which I illustrated how BDI teachers used discourse in ways that created liberatory learning conditions for the students they served.

In contrast to CDA researchers, who generally explore patterns in language across a large number of texts to illustrate the pervasiveness of dominant discourses, PDA researchers engage in more detailed analyses of a smaller number of texts (Stibbe, 2018). Their intent is to locate positive discourses that remain outside the mainstream. These discourses have the potential to benefit society in valuable ways if they are made more prevalent. The analyst thus tries to bring features of these positive discourses to light. This intent of PDA aligned with the purpose of this study, which was designed to illuminate for others how teachers can use discourse in the context of ICs to achieve the goals of culturally responsive/sustaining pedagogy.

Although PDA was first proposed more than two decades ago, Hughes (2018) argues that PDA remains underutilized, despite its potential for catalyzing a progressive agenda for social transformation. Hughes bases this claim on the lack of PDA citations in U.S. journals, lack of PDA studies in the syllabi of U.S. university graduate courses, and lack of positive discourse analysts located in the United States. By utilizing PDA in this study, I intended to add to the growing body of PDA research.

Despite the trends noted by Hughes (2018), PDA has been employed in education in a variety of ways. For example, PDA has been utilized to study implementation of peacebuilding pedagogy in Colombia (Calle-Díaz, 2019) and to analyze how a plurilingual approach to the Council of Europe’s Common European Framework of Reference for Languages empowers teachers (Gouveia, 2006/2007). In studies of U.S. teacher education, it has been used to explore development of pedagogical content knowledge and agency among preservice teachers (Gelfuso,
2017), to investigate the tools used by preservice teachers’ as they gain experience with racial literacy (Mosley & Rogers, 2011), and to illustrate ways an educator exhibited agency in the context of a U.S. curriculum fair presentation (Rogers & Wetzel, 2013). In the context of K-12 classroom discourse in the United States, Moses and Kelly (2017) applied PDA to interactions among emergent bilingual and monolingual first graders as they developed positive identities as competent readers.

This study added to PDA scholarship by focusing on teacher-student IC interactions in the context of diverse elementary classrooms. Although many researchers utilizing discourse analysis, CDA, or PDA in classroom contexts highlight a single episode from one teacher’s classroom (e.g., Calle-Díaz, 2019), a few episodes from a single classroom lesson (e.g., Sosa & Bhathena, 2019), or multiple lessons from a single teacher (e.g., Bloome et al., 2009), the current study explored discourse from multiple lessons of multiple teachers. Furthermore, this study addressed the critique that PDA research does not do enough to investigate the uptake of transformative discourses (Bartlett, 2012; Rogers & Wetzel, 2013). Institutional factors influencing such uptake were the focus of the third research sub-question (i.e., What institutional factors challenge and support culturally responsive/sustaining discourse practices?).

Researchers’ conception of context has also been a source of variability and critique with regard to studies of discourse (Rogers & Schaenen, 2014). In conversation analysis, for instance, the interpretations are based strictly upon that which is immediately evident in the text itself. CDA traditions, by contrast, have expanded conceptualizations of relevant context to encompass considerations for the historical, cultural, and institutional influences. However, the frequent skewing toward either fine-grained linguistic analysis (without sufficient consideration of larger social context) or analysis of broad social forces (without adequate attention to linguistic
analysis) has been a common critique (Bartlett, 2012; Rogers & Schaenen, 2014; Wodak, 2013). To address this critique, the PDA approach I utilized in this study incorporated a balance of both linguistic analysis and attention to broader social forces.

**Methods**

In this study, I employed PDA by drawing upon the CDA work of Fairclough (e.g., Chouliaraki & Fairclough, 1999; Fairclough, 1989, 1992, 1995, 2001). Fairclough was influenced in the development of this approach by social theorists (e.g., Althusser, 1971; Foucault, 1972; Gramsci, 1971) as well as literacy theorists and linguists (e.g., Bakhtin, 1981, 1986; Halliday, 1978). Fairclough’s approach focuses on social practices, which can be viewed both as what is done in a particular place and time (social action) and as actions that have taken on a certain level of permanency (habitual way of acting) (Chouliaraki & Fairclough, 1999). Social practices reproduce structures and also have the power to transform them. As Fairclough (2001) notes, “there is nothing that has been socially created that is incapable of being socially changed” (p. 134). This CDA approach emphasizes interconnections between semiosis (e.g., language) and other elements of social practices, including: (a) productive activity, (b) means of production, (c) social identities, (d) social relations, (e) cultural values, and (f) consciousness (Fairclough, 2001). Each of these elements had relevance for this study, as they are incorporated within the theory and practice of BDI (Herrera, 2016) and CSP (Paris & Alim, 2014) (refer to Chapter 2 for additional details).

In describing *discourse*, Fairclough (1992) delineates three dimensions. The first dimension, the linguistic form of discourse, is expressed through texts, which encompass both spoken and written language. This use of *text* falls in line with Halliday (1978). The second dimension is discourse as an instantiation of social (e.g., ideological, political) practice. In this
study, the social practices at play are educational; yet education is political by its nature, in the sense that it involves social goods and their distribution (Gee, 2014). Education serves ideological purposes as well, especially related to culture, race, and language (Gay & Kirkland, 2003; DiGiacomo & Gutiérrez, 2017). The third dimension, discursive practice, mediates the other two dimensions. Discursive practice is a particular type of social practice. The focus of this dimension is on the production, distribution, and consumption of texts. Given the specific nature of texts analyzed in this study (i.e., ICs enacted in elementary classrooms), exploration of text production was key. Figure 3.1 illustrates the nested nature of these dimensions of discourse.

**Figure 3.1.** Fairclough's Three-Dimensional Conception of Discourse

![Image](image)

*Source: Fairclough (1992), p. 73*

Fairclough’s (1989) approach likewise utilizes a three-part analysis progression: description, interpretation, and explanation. During the *description* phase, the researcher explains why a particular moment was chosen for analysis. The researcher then explores formal properties of the text, which can include both linguistic and non-linguistic features (e.g., facial expression,
gesture, posture). In the process of describing what is present in the text, the researcher often distinguishes it from other choices that might have been made instead. Potential areas of focus include vocabulary, grammar, and textual structures. The formal features of the text can be analyzed for four different possible kinds of value: experiential, relational, expressive, and connective (Fairclough, 1989, p. 112), each of which is simultaneously a trace of and a cue to the social situation at hand. Briefly, these four kinds of value can be characterized in the following way:

- Experiential value: relates to contents, knowledge, and beliefs
- Relational value: relates to social relationships being enacted
- Expressive value: relates to the social identities of those involved in the discourse
- Connective value: relates to ways parts of a text are connected to each other, as well as ways text can point toward the situational context (e.g., through pronouns) or the intertextual context (i.e., connections to other related texts)

The second phase in Fairclough’s (1989) CDA approach is interpretation. In this phase, the researcher interprets how the participants used cognitive, social, and ideological resources to arrive at some form of understanding of the discourse. Efforts are made to interpret the relationship between the situational context and the text. The text might also be interpreted in relation to previous texts that play a role in the current discourse. The interpretation process is top-down, in the sense that an understanding of the situational context influences understanding of the text. It is also bottom-up, in that an understanding about the text influences interpretations about the context. Fairclough (1989, p. 146) proposes four questions that relate to primary dimensions of the situation:

1. What’s going on? (activity, topic, and purpose)
2. Who’s involved?

3. In what relations?

4. What’s the role of language in what’s going on?

In this phase of analysis, the influence of the theory of Systemic Functional Linguistics (SFL) (Halliday, 1975; Halliday, 1978; Halliday & Hasan, 1985), which views language as a social phenomenon, is evident. Of particular relevance to the current study were SFL concepts related to register, which is determined by three dimensions: field, tenor, and mode (Halliday, 1978; Halliday & Hasan, 1985). *Field* aligns with Fairclough’s first interpretive question. As described by Halliday (1978), field reflects “what the participants in the context of situation are actually engaged in doing” (p. 222). Others have described field as the construal of experience (Bartlett, 2012), the subject matter, or the social action taking place (Wells, 1994). Field also includes the goals, processes, and materials of the social activity (Wells, 1993).

Tenor characterizes the enactment of social relations (Bartlett, 2012). It takes into account the “who” involved in the discourse of the event and reflects the status and roles of participants in relation to one another (Wells, 1994). Parallels can be drawn between tenor and the expressive value and relational value of text, which are referenced in Fairclough’s (1989) second and third interpretive questions, respectively.

Mode reflects the role of language in the activity (e.g., ancillary, constitutive) and the degree to which the linguistic process is shared by all participants (Wells, 1993). Mode is expressed in Fairclough’s fourth interpretive question. In view of a given text, mode indicates relationships between parts of the text to one another and to the specifics of the current context. For example, it encompasses the rhetorical function within portions of the text (e.g., commentary, prediction, recount), or of the text as a whole (e.g., math lesson) (Bartlett, 2012).
Mode further accounts for the spoken or written nature of the activity (Wells, 1993), also referred to as the channel (Fairclough, 1989).

Together, field, tenor, and mode serve as distinguishing characteristics that allow participants to discern the context of the situation, or “situation type,” which in turn influences the way they co-construct the text (Wells, 1994). Classroom teaching reflective of BDI represented the situation type explored in this study. Field, tenor, and mode “collectively, not piecemeal” determine the register, or “the types of meaning that are selected, and their expression in grammar and vocabulary” (Halliday, 1978, p. 223). The SFL terminology of field, tenor, and mode provides a succinct way of referring to the multiple dimensions of the situational context. The relevance of register to educational practice—and especially educational change—is aptly articulated by Wells (1994). Drawing upon Halliday’s (1978) description of the linguistic system as a “meaning potential” (p. 141) actualized in the form of a specific text, Wells contends:

. . . teachers are not entirely constrained by traditional definitions of the situation-types that constitute a typical “lesson.” By making different choices from their meaning potential, particularly with respect to tenor and mode, they can significantly change the register and genre that prevail and thereby create different learning opportunities for their students. (1994, p. 49)

The ways teachers interact with learners through language influences their relationships as well as the process by which knowledge is constructed. These relationships and processes thereby influence the types of discursive practices observable in the context of a lesson.

Given the central role of relationship-building in BDI, I anticipated tenor playing a large role in the register of IC texts explored. Similarly, BDI teachers strive to bring all learners into
the meaning-making process of the learning community. As such, I expected that mode would
have an influential role in the classroom interactions of BDI teachers. The crucial element of
teacher agency in making discursive decisions is conveyed by Wells (1993):

... within the limits set by the affordances and constraints of the situation, participants
are able to enact the beliefs and values they espouse by choosing to interact in one way
rather than another: by minimizing social distance rather than maximizing it, for example,
or by sharing equally in the process of text production rather than allowing it to be a
monologic process. (p. 12)

It is through such daily exchanges—the moment-by-moment use of language to create shared
meaning—that the social system is continually recreated and has the potential to be transformed
(Halliday, 1978; Fairclough, 1992; Rogers, 2014).

The third and final phase of Fairclough’s (1989) CDA approach, the explanation phase,
involves the researcher drawing upon larger theories to reveal ideological foundations for the
interpretations made in the prior phase. It is within this explanation phase that the researcher
situates the particular instances of interaction within the broader institutional and societal
contexts. Fairclough (1989, p. 166) offers three primary questions that can be examined in
relation to a particular discourse:

1. Social determinants: what power relations at situational, institutional and societal
   levels help shape this discourse?
2. Ideologies: what elements of MR [members’ resources] which are drawn upon have
   an ideological character?
3. Effects: how is this discourse positioned in relation to struggles at the situational,
   institutional and societal levels?
In this phase, the researcher explains how social determinants of discourse at the level of situation, institution, and society influence the discourse. On the other hand, the researcher also explains how the discourse either reproduces or works to transform social structures. The explanation phase in CDA tends to emphasize critical aspects, given the typical foci of study; however, it is also during this phase that struggles contributing to the transformation of existing power relations are highlighted (Fairclough, 1989). This phase of the current study involved locating assumptions in counterhegemonic practices that have transformative and emancipatory/liberatory potential. Additional details regarding how carried out the data analysis process are discussed later in this chapter. Figure 3.2 illustrates the relationships among the primary elements of the methodological framework.

**Figure 3.2.** Methodological Framework Elements
Context

The current study was situated within a longitudinal ethnographic research project involving four elementary schools within a large, highly diverse district in the U.S. Midwest. State performance standards indicated that the district was underperforming, and the focal elementary schools were among the lowest achieving. The school principals at each of the four schools decided to provide teachers with professional development (PD) centered on BDI in order to support their efficacy and effectiveness with the largely African American and Latinx student populations they served. The site-specific professional development involved (a) whole-school inservice sessions, (b) bi-weekly PD for grade-level teams, and (c) individual support for participating teachers (e.g., classroom observations and debriefing, lesson planning, modeling). The bulk of PD efforts took place over the course of three years. Teachers gradually took on full ownership of their BDI implementation efforts.

The ethnographic research surrounding this PD initiative has focused on exploring the meaning of the interactions, behavior, and language of the grade-level teachers within this culture-sharing group. The teachers of the participating schools comprise a culture-sharing group in that they have been trained in a specific method of instruction, and they have adopted that method and its associated philosophical stance, as evidenced in their pedagogical practices. According to Wolcott (2010), ethnographies seek to answer: “What do people in this setting have to know and do to make this system work?” (p. 74). This type of question sets the stage for the current research, which explored in depth the types of discourse BDI teachers utilize, especially through ICs, to make culturally responsive/sustaining classroom ecologies (reflective of a BDI “system”) a reality for their learning communities.
Subjectivity of the Researcher

I am a White female of German ethnicity from a small, rural Midwest town. I am familiar with the city in which the district is located, as I grew up within 20 miles of the location, worked in the city during my youth, and regularly visit family in the area. I have a background in English literature and adult education, and I am a native English speaker with limited fluency in Spanish. I have spent the last 19 years working at an educational research center within the College of Education at a predominantly White Midwest university.

The center at which I work has a mission to foster K-16 educators’ capacity for pedagogical effectiveness with CLD students and families. In my collaborations with colleagues, I have strived to increase the number of teachers of Color through recruitment and retention efforts at the institution, and to inform the instructional practices and perspectives of educators in U.S. and international settings. I have facilitated PD to support elementary teachers who serve emergent bilinguals and other CLD students, middle school and high school teachers who support newcomer learners, and English as a foreign language (EFL) teachers who foster language development for students of all ages. Collectively, such experiences have influenced my perspectives on the nature of reality and knowledge, broadly, and on language acquisition, teaching, and learning, more specifically. I approach learning from a social constructivist perspective and promote a communicative/cognitive approach to language acquisition.

My views about culturally responsive/sustaining pedagogy, as well as my own research on these and related topics, has been greatly influenced by the philosophy and method of BDI (Herrera, 2010, 2016, 2022). An emphasis on critical reflection (i.e., reflection upon assumptions rooted in one’s socialization) (e.g., Herrera & Murry, 2016) has allowed me to progressively come to better understand myself, interactions with others, and the differential implications of
systemic and local practices on educators, students, and families whose identities reflect different intersectionalities. Through this study, my goal was to gain insights into discursive instructional practices that can be used more widely by teachers to enhance educational outcomes for all students, especially those who are culturally and linguistically diverse. I anticipate the findings of this study will inform my future PD efforts.

I approached the current study from the position of an informed outsider, while considering insider and outsider positions to be poles of a continuum rather than a simple dichotomy (Holmes, A., 2020). Although I had not previously worked directly with the teacher participants, I was involved in prior data management and data analysis related to the larger ethnographic research project (in which the participants were involved) that provided the backdrop for the current study. I helped to archive data (e.g., documents, questionnaires, interview transcripts, classroom photos) and collect district and school demographic information. I also was involved in data analysis for co-authored studies resulting from the BDI PD efforts, in collaboration with other researchers as well as the lead researcher/PD provider. I did not visit the teachers on site, but served the role of a peer debriefer for the lead researcher in relation to efforts in the district.

I also viewed “insider-outsiderness” with a more pluralistic lens, recognizing that I might be perceived by a participant as an insider in relation to some dimensions of my positionality (e.g., gender, race, BDI knowledge) while simultaneously an outsider along others (e.g., knowledge of school-specific norms) (Holmes, A., 2020, p. 7). Moreover, different participants might have perceived me in different ways, based on similarities and differences in their own positionalities. Perspectives related to insider/outsider status also might have shifted throughout the study and brought different influences to bear on the research process. I remained attentive to
my subjectivity and engaged in reflexivity throughout the study. I discuss reflexivity further in a subsequent section of this chapter (i.e., Credibility of the Research).

**Site and Sample**

The site for this study was an elementary school within a large Midwest district. The district reflects significant racial and linguistic diversity. The student population is largely Hispanic (35%), White (32%), and African American (20%) (Kansas State Department of Education [KSDE], 2021). More than 104 languages are spoken among families of students (district website, n.d.), and approximately 20 percent of all students are considered English language learners (KSDE, 2021). The majority of learners (78%) also come from economically disadvantaged backgrounds.

The demographic profile of the school site is likewise racially and linguistically diverse. The student population is primarily Hispanic (62%), White (24%), and African American (9%) (KSDE, 2021). Emergent bilinguals comprise a significant proportion (38%) of the school population. Approximately 90 percent of the school’s students come from economically disadvantaged backgrounds.

The district reflects national trends with regard to opportunity gaps among student subgroups, as evidenced in academic outcomes (see for instance 2019 NAEP reading outcomes, National Center for Education Statistics [NCES], n.d.). For example, disparities in district outcomes are evident when exploring the percentage of students who met or exceeded performance targets in English Language Arts. White learners outperformed both African American learners (average gap of 24 points in Grades 3-5) and Hispanic learners (average gap of 19 points in Grades 3-5) (KSDE, 2020). Disparities also exist between ELL and non-ELL subgroups in relation to ELA performance outcomes, with a gap of 23 points in Grade 3 that
increases to 29 points in Grade 5. These significant opportunities gaps were the impetus for the district to collaborate with educational researchers to provide BDI PD to multiple district schools.

I invited three female teachers from the research site to participate in the study. The teachers had received PD on BDI, a communicative and cognitive method of making the curriculum relevant, accessible, and rigorous for all students in order to foster content and language development (Herrera, 2016). To increase the likelihood that classroom instruction included practices reflective of creating a culturally and linguistically responsive/sustaining classroom ecology, a purposeful sample was used (Creswell, 2013; Morrow, 2005). The participants were previously identified as teachers who implement promising practices for emergent bilinguals and other culturally diverse students. This evaluation was made by trained observers utilizing the Inventory of Situationally and Culturally Responsive Teaching (ISCRT) (Herrera, Perez et al., 2011; MacDonald et al., 2013; Murry et al., 2015; Pérez et al., 2012) (see Appendix A). The three teachers selected for inclusion in this study received a minimum composite score of 2.0 on the ISCRT, as rated by BDI PD facilitators.

The ISCRT (pronounced “I assert”), a systematic classroom observation tool initially titled the Biography-Driven Practice Rubric, is an enhancement upon the Standards Performance Continuum (SPC) (Doherty, Hilberg, Epaloose et al., 2002; Doherty, Hilberg, Pinal et al., 2003; Tharp & Dalton, 2007). As described in Chapter 2, the SPC was developed by researchers at the Center for Research on Education, Diversity and Excellence to determine the degree to which teachers implemented the five Standards for Effective Pedagogy and Learning (see CREDE, 2021). Retaining the original emphasis on the five standards (i.e., joint productive activity, language development, contextualization, challenging activities, and instructional conversation),
the ISCRT developed by researchers at the Center for Intercultural and Multilingual Advocacy was adapted to more explicitly include theory- and research-based practices for supporting the development of emergent bilinguals (e.g., Cummins, 1981; Echevarria et al., 2008; Krashen, 1981, 1982; Goldenberg, 2008; Herrera, 2010; Teachers of English to Speakers of Other Languages, 2010).

The ISCRT comprises 22 indicators of promising practices, categorized into five standard-based subscales. Teachers are rated on each indicator using a 4-point scale, where 0 = Not observed, 1 = Emerging, 2 = Developing, 3 = Enacting, and 4 = Integrating. An ISCRT composite score is generated by averaging scores attained on the 22 indicators. Given that the ISCRT is meant to capture a lifetime of progress in utilizing culturally and linguistically responsive practices (Murry et al., 2017), a minimum threshold of 2.0 for selected participants increased the likelihood that culturally responsive/sustaining interactions were captured on video recordings of observed lessons.

To be considered for selection, the teacher’s lesson-based interactions with students had to be the focus of at least two archived video recordings. The teacher also had to agree to participate in an individual interview and provide data described in the “Data Collection” section of this chapter. All three invited teachers agreed to participate in the study. Rich descriptions of the classroom teaching contexts as well as the institutional context were gathered through this study and they informed interpretations arising from the research. Table 3.1 summarizes key details from the profile for each participant at the time her classroom instruction was video recorded.
Table 3.1. Participant Profile Information

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Grade Level</th>
<th>Ethnicity</th>
<th>Languages Spoken</th>
<th>Years Teaching</th>
<th>Years at Current School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby Nelson</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>European (Anglo) American</td>
<td>English</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Leticia Ramirez</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Hispanic-American</td>
<td>Spanish, English</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Michelle Scott</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>European (Anglo) American</td>
<td>English</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**Informed Consent and Confidentiality**

Before conducting this research involving human subjects, I obtained approval from the Kansas State University Institutional Review Board (IRB). I also gained permission from the school district before inviting the selected teachers to participate in the study. All participants were over the age of 18. I sent an individualized email invitation to each intended participant to explain the general purpose of the study. Based upon their indications of interest, I then followed up with communication that discussed the types of data collection processes involved. Ultimately, I provided full details of the study, requesting consent (Appendix B) to analyze archived classroom video and documents and detailing additional data to be collected and analyzed, namely: (1) a current teacher profile questionnaire, and 2) a two-part, individual interview to be conducted via the Zoom platform, with the audio recording transcribed. Additional details in the letter of informed consent included:

- Approximate duration of the study
- Assurance of confidentiality
- Intent to publish the study results
- Opportunity to withdraw from the study at any time

Participants provided digital versions of their signed letters of informed consent. I kept these as part of the research records, separate from the data.

With regard to the archived data, I made copies of the select video files and digital documents; the original versions remain in the secure storage location. These data, along with the interview audio recordings, interview transcriptions, questionnaires, and analytic memos collected as part of this study were stored on a password-protected computer. A backup copy of the data was kept on an external storage device and stored in a locked file cabinet. I will retain all study data for no more than seven years, after which I will destroy the data.

To protect the identity of the participants involved in the study, I created a pseudonym for each. To ensure confidentiality, only the pseudonyms were used for data analysis and data reporting; likewise, only the pseudonyms will be used publication purposes. Participants also were informed that after the interviews were fully transcribed, the video recordings of the interviews would be destroyed and only the audio files would be retained.

**Data Collection**

Archived data utilized in this study included video recordings of classroom instruction and documents (i.e., past teacher profile questionnaires, classroom community profiles). Data collected for this study comprised current teacher profile questionnaires (Appendix C), individual interviews, and analytic memos. Video recordings were used to explore the interpersonal interactions, including both verbal and nonverbal communication, between teachers and students. I was a complete observer (Creswell, 2013) with regard to these classroom
observations, as I drew upon an existing corpus of videos collected as part of the longitudinal ethnographic research efforts previously described.

To capture relatively large portions of classroom teaching and learning processes, each video selected had to be a minimum of 30 minutes in duration. A total of nine videos were considered. Together, these comprised approximately 10 hours and 45 minutes of classroom teaching. Ultimately, two video recordings from each teacher were selected for analysis. Actual durations of the selected videos ranged from 32 minutes to one hour and 55 minutes. From these, I identified 11 episodes of IC across the three participants (average of 16 total minutes of IC per participant). Table 3.2 summarizes the reviewed videos and episodes selected for each teacher. Episodes were selected to include IC used with students in varying grouping configurations and to highlight a wide range of teacher discourse practices. Table 3.3 provides the primary discourse features that influenced the selection of each episode.

Written teacher profile questionnaire and classroom community profile documents (Appendix D) collected during the same academic year as the video data provided me with (a) participants’ personal demographic characteristics, (b) information about their professional preparation as well as events and circumstances influential to their approach to teaching CLD students, and (c) demographic and contextual information about the student populations they were serving. I collected current teacher profile questionnaires (Appendix C) in order to gather updated information that allow for comparison of how teachers describe their positionality and illuminated events or changes in perspective that had transpired for participants since the collection of their original profiles.
Table 3.2. Reviewed Videos and Episodes Selected

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pseudonym</th>
<th>Video Duration</th>
<th>Selected as</th>
<th>Number of Selected Episodes</th>
<th>Episode Timestamps (Duration)</th>
<th>Grouping Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td></td>
<td>1:26:18</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Abby</td>
<td>32:15</td>
<td>Yes</td>
<td>2</td>
<td>1:58-8:26</td>
<td>(6 min 28 sec)</td>
<td>Whole group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17:01-19:36</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2 min 35 sec)</td>
<td>Small group/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47:11-50:19</td>
<td>Small group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3 min 8 sec)</td>
<td></td>
</tr>
<tr>
<td>Abby</td>
<td>1:09:14</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Abby Total: 18 min 4 sec

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pseudonym</th>
<th>Video Duration</th>
<th>Selected as</th>
<th>Number of Selected Episodes</th>
<th>Episode Timestamps (Duration)</th>
<th>Grouping Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leticia</td>
<td></td>
<td>45:48</td>
<td>Yes</td>
<td>1</td>
<td>0:35-7:36</td>
<td>Whole group/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(7 min 1 sec)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Small group</td>
<td></td>
</tr>
<tr>
<td>Leticia</td>
<td></td>
<td>43:59</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Leticia</td>
<td>1:03:21</td>
<td>Yes</td>
<td>2</td>
<td>6:43-12:25</td>
<td>(5 min 42 sec)</td>
<td>Whole group/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4 min 7 sec)</td>
<td>Partners</td>
</tr>
</tbody>
</table>

Leticia Total: 16 min 50 sec
Upon completion of the primary discourse analysis work, I conducted a two-part interview with each participant (see Appendix E for the interview protocol). During the first part, I utilized video elicitation, in which I shared the episodes of the teacher’s classroom interactions that were analyzed in detail. The teacher then provided her perspectives on aspects of the exchanges that were significant for the facilitation of learning. Figure 3.3 offers an example of from Michelle’s interview in which she shared her thoughts about the episode of recorded instruction she had watched. During this portion of the interview, I also was able to share some of my interpretations, hear the participant’s response, and ask clarifying questions. Figure 3.4 provides an excerpt from Abby’s interview that illustrates the back-and-forth exchange of perspectives that occurred. Figure 3.5 highlights a selection from Leticia’s interview in which

<table>
<thead>
<tr>
<th>Time</th>
<th>Group</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:39:21</td>
<td>Yes, 4 min</td>
<td>Small group (1 min 23 sec)</td>
</tr>
<tr>
<td>43:21-44:49</td>
<td>Whole group</td>
<td>(1 min 28 sec)</td>
</tr>
<tr>
<td>51:22-54:39</td>
<td>Small group</td>
<td>(3 min 17 sec)</td>
</tr>
<tr>
<td>63:13-70:22</td>
<td>Whole group/</td>
<td>Individual (7 min 9 sec)</td>
</tr>
</tbody>
</table>

Michelle Total: 13 min 17 sec

<table>
<thead>
<tr>
<th>Time</th>
<th>Group</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:29:28</td>
<td>Yes, 0 min</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Michelle Total: 13 min 17 sec

Total Reviewed: 10 hrs 45 min 6 sec
Total Analyzed: 48 min 11 sec
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Episode</th>
<th>Discourse Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>1</td>
<td>Translanguaging practices; shifts in teacher/student authority in relation to different ways of knowing</td>
</tr>
<tr>
<td>Abby</td>
<td>2</td>
<td>Teacher’s prevalent use of visual/nonverbal communication to support learning</td>
</tr>
<tr>
<td>Abby</td>
<td>3</td>
<td>Teacher’s emphasis on students’ individual and shared ways of knowing as they engaged with the topic</td>
</tr>
<tr>
<td>Abby</td>
<td>4</td>
<td>Joint sharing of ideas between the teacher and students as they negotiated meaning</td>
</tr>
<tr>
<td>Leticia</td>
<td>5</td>
<td>Teacher’s efforts to listen to learners and build community</td>
</tr>
<tr>
<td>Leticia</td>
<td>6</td>
<td>The way the teacher encouraged learners to work together in pairs and as a class to learn from each other and to contribute to the collective learning process</td>
</tr>
<tr>
<td>Leticia</td>
<td>7</td>
<td>The way the teacher refrained from either confirming or disconfirming students’ initial connections and instead allowed learning to unfold as a natural process of discovery</td>
</tr>
<tr>
<td>Michelle</td>
<td>8</td>
<td>Teacher’s efforts to build relationships with students through her willingness to discuss life outside the classroom and her use humor</td>
</tr>
<tr>
<td>Michelle</td>
<td>9</td>
<td>The way the teacher positioned herself as a learner in relation to the topic and as a person who sometimes makes mistakes</td>
</tr>
<tr>
<td>Michelle</td>
<td>10</td>
<td>Teacher’s efforts to maximize gestures in order to elicit students’ ideas and language use</td>
</tr>
</tbody>
</table>
The multiple ways the teacher affirmed students and highlighted their success in the classroom

**Figure 3.3.** Interview Part 1: Teacher Perspective on IC Episode

Melissa: Okay. Thoughts on this one.

Michelle: Um, well I really liked how, I mean, we spend a lot of time building background knowledge. And I feel like we've gotten a little bit away from that, but it is so important. For one, it gets 'em like excited just, it's fun, you know, just to make all those connections and talk about it. And I really like how we categorized them. I think that's really, really important to learn categories and how we did that. Again, I went back, like I knew a lot of the kids, so the family one, I think that was probably Dylon's (pseudonym), um, like I just knew that his family loved baseball and that's what they did. So, a lot of those things, that's all.

**Figure 3.4.** Interview Part 1: Exchange of Perspectives

Melissa: Yeah, and you did such a great job of like revoicing what they were sharing, you know. Like, they were just like, “What else could, what else can we get from the river? Water. Water from the river.”

Abby: (laughs)

Melissa: You know, it was like so perfect! And there's a moment in there where you talk about, okay, somebody said “boat” and our word for this week is “canoe,” so we're going, let's, let's use “canoe” this week.

Abby: Yeah.

Melissa: You're just so natural in how you're kind of like, always kind of ramping it up.

Abby: Yeah, yeah. And I, and, and that's always validating you know. And that's sometimes tough because, like whatever word they come up with, find a way that it does connect so the kids aren't like, “No, that was a dumb word. That doesn't work,” you know like that, like “water.” “Yes, people drink water. You bathe in wat… Like you can find a connection to anything, you know. And so it's like, like that's what, you know, the whole, and that's what I really, you know, loved about like I said the DOTS chart was just that every kid had their own, but then, at the same time, it was a group work, but then, at the same time, it was a whole class work. And it was just, it was, it was beautiful. It was, it was great.
Figure 3.5. Interview Part 1: Questioning for Clarification

Melissa: And now, I’m not sure how many words you generally use. Like in this lesson, they did the two words.

Leticia: Yeah.

Melissa: Now is this something that you build through the week, and they might add more words? Or do you usually keep it at two, and that's, you pick the top two? Talk to me about that a little bit.

Leticia: It just depends on the topic and where I want them to go with this lesson. So that goes back to the standard. So, if I’m having them compare something, if I’m having them give details. It just depends on what that standard is, and what words best are suited. So, usually with, especially with first grade, I try to stay within that two- to three-word range, but last year I was blessed to be a two/three combo, and my third graders would have up to five and six words. And so, it just depends on the group of kids, too, like how much they can handle, how much they can process. With the first graders I wouldn't go above three.

Melissa: Yeah.

Leticia: Maybe four, depending on the words, but yeah.

she clarified her selection of vocabulary words to use in conjunction with the DOTS chart BDI strategy (Herrera, 2016). As these examples illustrate, this portion of the interview allowed for in-depth member checking (Hays, 2004) with regard to interpretations made about the classroom interactions.

During the second part of the interview, I utilized a semi-structured interview protocol to gain insights into the participant’s perspectives on institutional factors that challenge or reinforce her efforts to engage in culturally responsive/sustaining pedagogical practices. This part of the interview provided me with greater depth of understanding of the institutional context. Such insights informed the final layer of data analysis (i.e., the explanation phase). This part of the interview especially bolstered my ability to address issues related to uptake of transformative discourses (Bartlett, 2012; Rogers & Wetzel, 2013). Figure 3.6 provides a short excerpt from
Michelle’s interview as she discussed institutional factors that influenced her use of culturally responsive/sustaining classroom discourse. During the interview, I informed participants that they would have an opportunity to review the accuracy and completeness of the interview transcript and my interpretations drawn from the interview data.

**Figure 3.6.** Interview Part 2: Discussion of Institutional Factors

| Melissa: Okay, well and you've mentioned other colleagues like [teacher name] and [teacher name] and so, to what degree do other colleagues influence the way you do your instructional conversations in your classroom, or? |
| Michelle: I mean, it's huge. We, for the most part, we're a really close school. And a lot of us, we've probably been together for 10 plus years. (laughs) And [lists two teacher], we all are on a team together, so we're very close. And then like I said, [teacher name] she actually is, in my room this year. So, it's just nice because we all believe and have buy-in to that. And we all know the strategies, and it's fine because we all do 'em a little bit different. But yeah, it's almost just like, we just know, I don't know, like a lingo almost between us. Like (laughs) And it was such a huge shift for our school when we had all the BDI training but, it's almost like we were raised with that, if that make sense. |

I generated analytic memos (Straus & Corbin, 1990) throughout the research process. Such memos are used to document hunches, queries, and interpretations, and they are considered part of the corpus of data that is reviewed and drawn upon in the analysis process (Morrow, 2005). Figure 3.7 provides a sample analytic memo related to the role of proximity in the discourse analysis process. In Table 3.4, I summarize the sources of data I utilized and collected throughout the study; the table includes a brief description and the data collection schedule for each.
As previously mentioned, after a general review of the primary corpus of data (i.e., collected video recordings), I identified episodes that exemplified aspects of culturally responsive/sustaining pedagogy. Episodes, according to van Dijk (1981), consist of “coherent sequences of sentences of a discourse, linguistically marked for beginning and/or end, and further defined in terms of some kind of ‘thematic unity’—for instance, in terms of identical participants, time, location or global event or action” (p. 177). I selected such episodes by locating what Fairclough (1992) has referred to as “cruces” or “moments of crisis.” Such cruces are “moments in the discourse where there is evidence that things are going wrong” (Fairclough, 1992, p. 230). CDA researchers then analyze these interactions to illustrate how dominance, power, discrimination, and control may be evidenced in the meanings and intentions of individuals involved (Talbot, 2010). In the current study, I instead applied the reframing of cruces for PDA that was utilized by Calle-Díaz (2019). In her work, Calle-Díaz identifies “critical moments,” characterized by the presence of “the discourse we like rather than the discourse we wish to criticize” (Macgilchrist, 2007, p. 74).
<table>
<thead>
<tr>
<th>Data Source</th>
<th>Quantity/Description</th>
<th>Data Collection Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom video</td>
<td>2 lessons per participant (n=3); each lesson minimum of 30-minutes in duration</td>
<td>N/A, archived video</td>
</tr>
<tr>
<td>Original teacher profile</td>
<td>1 written teacher profile questionnaire per participant collected during the academic year in which the classroom video was collected</td>
<td>N/A, archived document</td>
</tr>
<tr>
<td>Classroom community profile</td>
<td>1 written questionnaire per participant summarizing aspects of the classroom community in the academic year in which the classroom video was collected</td>
<td>N/A, archived document</td>
</tr>
<tr>
<td>Current teacher profile</td>
<td>1 written teacher questionnaire per participant that reflects their current profile</td>
<td>February–March, 2022</td>
</tr>
<tr>
<td>Individual interview</td>
<td>1 individual interview, involving video elicitation and a semi-structured interview protocol</td>
<td>February–March, 2022</td>
</tr>
</tbody>
</table>
Selection of episodes from the video recordings of classroom interactions was informed by the composite theoretical framework of the study. As detailed in Chapter 2, BDI delineates four interrelated dimensions of the CLD student biography (i.e., sociocultural, linguistic, cognitive, academic) (e.g., Herrera, 2016). For this study, the sociocultural and linguistic biographies of learners provided a focal lens for my analysis of participants’ ICs practices of interest related to teachers’ efforts to surface and maximize students’ funds of knowledge (Moll et al., 1992) and prior knowledge (Herrera, 2016). Given the centrality of language to the ongoing construction/reconstruction of culture (Halliday, 1978; Wells, 1994), I also attended to teacher efforts to sustain home languages as valued resources for meaning making and expression. In this way, CSP (Paris, 2012; Paris & Alim, 2014), with its emphasis on sustaining heritage and community practices as well as the language of the learner, further informed my selection of specific episodes.

Use of video annotation software (i.e., VideoAnt) supported the process of locating and coding video data to serve as possible episodes. Such software also facilitated my inclusion of annotations regarding nonverbal communication (e.g., gaze, gesture, proximity) germane to the detailed analysis of the text. Figure 3.8 provides an example of VideoAnt annotations related to a lesson from Leticia’s classroom (video image cropped to maintain participant confidentiality). This sample illustrates documentation of multiple teacher discourse practices, including Leticia’s use of proximity (i.e., “Comes level with student (crouches)”).
The episodes served as the source of the IC texts, which I created by transcribing the episodes to include the recorded language acts and key semiotic features. I drew upon existing transcription conventions (e.g., Bartlett, 2012; Bloome et al., 2009; Moore, 2014) to document elements of analytical interest in the data. The process required me to move back and forth between the video and the transcription. Developing the detailed transcription was, in itself, a form of data analysis, because the decisions I made throughout the process reflected my own orientation and biases; as such, the transcription was more than simply a written version of the recorded words (Moses, 2012; Ochs, 2008). Additional details regarding episode transcriptions for this study are provided in Chapter 4.

I next applied the three-part analysis progression of description, interpretation, and explanation (Fairclough, 1989). During the description phase, I explained why a given moment was chosen for analysis. I explored textual-linguistic evidence of experiential, relational, expressive, and connective value. To help guide the process, I referenced the ten primary questions (along with sub-questions) suggested by Fairclough (1989, pp. 110-111). These
questions (see Appendix F) supported me to consider the vocabulary, grammar, and textual structures of the discourse. As Fairclough notes, the individual questions/sub-questions may or may not be relevant to the researcher’s purpose or needs, depending on the data being analyzed, but they serve as a starting point.

In the interpretation phase, I interpreted how the teachers and students used resources (e.g., cognitive, social, and ideological) to arrive at some form of understanding of the discourse. The SFL concepts of field, tenor, and mode allowed me to describe the situational context of each episode with a degree of uniformity. The composite theoretical framework for this study, which connects key concepts of sociocultural theory, BDI, and CSP, supported my interpretations of the ICs. In this phase of analysis, I made explicit how the situational context (e.g., instructional processes, teacher practices) influenced the classroom discourse. Likewise, my interpretations served to illuminate ways the co-constructed discourse influenced the situational context of the BDI classroom ecology.

During the explanation phase, I made connections between my interpretations and broader institutional and societal structures. To do so, I explored how power relations at societal, institutional, and situational levels influenced the discourse. I identified aspects of the ICs that were ideological in nature. I drew upon theoretical constructs (e.g., third space) and larger educational theories, such as liberatory praxis (e.g., Freire, 1970) and critical pedagogy (e.g., Giroux, 1997), to support my ability to explain the influence of ideological assumptions rooted in relations of power, including more equitably distributed power. In this phase of analysis, I also explored how the discourse within the selected episodes worked to advance the transformation of institutional and social structures. Figure 3.9 summarizes the three-part analysis progression.
Analysis of the individual interview data further informed the discourse analysis. The first portion of the interview, in which the participant reviewed the video recorded episodes of classroom discourse, provided insights into how the teacher interpreted her own discourse practices, especially in relation to BDI. Insights from this portion of the interview, therefore, informed the interpretation phase of analysis. The second part of the individual interview was designed to surface factors at the institutional level that promote and/or inhibit each teacher’s use of BDI in classroom practice. As such, the data collected yielded insights especially relevant to the explanation phase of analysis.

Figure 3.10 summarizes the four overarching phases of data analysis that I undertook in this study. Key aspects of each phase are highlighted. The sources of data utilized in each phase are also specified. Table 3.5 further details the data sources used to answer each research sub-question.
**Figure 3.10. Phases of Data Analysis**

<table>
<thead>
<tr>
<th>Text Selection &amp; Transcription</th>
<th>Description</th>
<th>Interpretation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Episode selection informed by theoretical framework</td>
<td>• Exploration of formal text properties</td>
<td>• Connections between text and situational context (field, tenor, and mode)</td>
<td>• Connections between discursive practice and broader institutional and social contexts</td>
</tr>
<tr>
<td>• Transcription development</td>
<td>• Connections to experiential, relational, expressive, and connective value</td>
<td>• Interpretation of discursive practice using theoretical framework</td>
<td>• Explanation informed by larger educational theories</td>
</tr>
<tr>
<td>• <strong>Data sources:</strong> classroom video, analytic memos</td>
<td>• <strong>Data sources:</strong> text, classroom community profile questionnaire, original teacher profile questionnaire, analytic memos</td>
<td>• <strong>Data sources:</strong> text, classroom community profile questionnaire, original and current teacher profile questionnaires, individual interview (Part 1: video elicitation), analytic memos</td>
<td>• <strong>Data sources:</strong> text, classroom community profile questionnaire, original and current teacher profile questionnaires, individual interview (Part 2: semi-structured interview protocol), analytic memos</td>
</tr>
</tbody>
</table>
Table 3.5. Alignment of Data Sources to Research Sub-Questions

<table>
<thead>
<tr>
<th>Research Sub-Question</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-question 1</td>
<td>Video/text, classroom community profile questionnaire, original teacher profile questionnaire, analytic memos</td>
</tr>
<tr>
<td>Sub-question 2</td>
<td>Video/text, classroom community profile questionnaire, original and current teacher profile questionnaires, individual interview (Part 1: video elicitation), analytic memos</td>
</tr>
<tr>
<td>Sub-question 3</td>
<td>Video/text, classroom community profile questionnaire, original and current teacher profile questionnaires, individual interview (Part 2: semi-structured interview protocol), analytic memos</td>
</tr>
</tbody>
</table>

Credibility of the Research

In the field of CDA, there is limited discussion of criteria for qualitative rigor (Mullet, 2018). Therefore, I primarily utilized Lincoln and Guba’s (1985) four criteria for establishing trustworthiness: credibility, transferability, dependability, and confirmability. Credibility relates to the likelihood that the findings and interpretations will be credible. I utilized strategies of triangulation and member checking to bolster credibility.

Triangulation occurs when the researcher utilizes multiple methods or data sources to address the same question (Leavy, 2017). Moses and Kelly (2017) further reference use of multiple data points to support triangulation of claims. In this PDA study, triangulation was achieved through the use of multiple data sources (i.e., classroom video, documents, teacher profile questionnaire, individual interview) to answer each research sub-question (see Table 3.5).
Multiple data points further anchored the interpretations and claims I made as a result of analyzing the data.

According to Hays (2004), member checking relates to actions taken by researchers to corroborate their assumptions and interpretations with study participants. Participants also are commonly provided the opportunity to verify the accuracy of interview transcriptions (Hays, 2004). In the current study, member checking of my initial analytic interpretations occurred during the two-part individual interviews. Using video elicitation, I provided participants the opportunity to voice their own interpretations of the focal classroom practices. This served to balance or add nuance to my own interpretations, which I shared in the course of the interview. Participants also had the opportunity to member check the typed transcription of their interview in order to clarify, expand, or correct, as needed. I additionally provided participants with a draft of my interpretations arising from their semi-structured interview data, to ensure they had the opportunity to review and respond.

Transferability was targeted through the development of “thick descriptions” of the educational context and classroom practices involved (Geertz, 1973). Drawing on the work of Gilbert Ryle, Geertz (1973) described thick descriptions as the result of researchers going beyond what is merely observed to also explain their interpretation of the meaning behind the observed actions. All behavior occurs within a specific context. The discourse and gestures used by individuals are produced with the intent that they be perceived and interpreted in particular ways. Assumptions about the significance of actions (on the part of the actor) reflect assumptions of shared culture with the intended receivers (Geertz, 1973). CDA is inherently geared toward development of thick descriptions through its focus on making and explaining interpretations of discourse.
Information about the context included in the researcher’s thick descriptions support readers’ ability to determine the “degree of congruence” or “fittingness” between the context of the study and the context in which they might desire to apply the findings (Lincoln & Guba, 1985, p. 124). The determination of transferability made by readers is also informed by information the researcher provides about herself (“the researcher as instrument”), participants, processes, and researcher-participant relationships (Morrow, 2005, p. 252). My statement of subjectivity, which I provide in the subsequent section of this chapter, bolstered this criterion of trustworthiness.

**Dependability** is closely related to credibility and is essentially intended to foster the ability of future researchers to replicate the study. According to Lincoln and Guba (1985), it is a “means for taking into account both factors of instability and factors of phenomenal or design induced change” (p. 299). Given that the process of CDA is highly dependent upon the emerging and evolving interpretations being made about the data, an audit trail of the research processes and activities, influences on data analysis, and so forth (often in the form of analytic memos), was kept to support the ability of others in the field to examine the research in detail (Morrow, 2005).

To address **confirmability**, the researcher documents and examines the process used to generate the product of the research, with a focus on the data, interpretations, findings, and recommendations (Lincoln & Guba, 1985). This criterion of trustworthiness is founded on the view that the integrity of the study’s findings “lies in the data and that the researcher must adequately tie together the data, analytic processes, and findings in such a way that the reader is able to confirm the adequacy of the findings” (Morrow, 2005, p. 252). A clear audit trail will bolster confirmability by providing evidence of the research process undertaken. Classroom
video, teacher and classroom profile documents, teacher profile questionnaires, interview audio recordings, and transcriptions of the video episodes as well as the individual interviews helped to document this process.

Special attention was given to reflexivity, which involves the researcher acknowledging, explicating, and taking into account their own biases in relation to the study (Lincoln & Guba, 1985). Reflexivity is emphasized in CDA, given the researcher’s role as the primary tool for analysis (Mullet, 2018). To support management of my previously discussed subjectivity (i.e., my persuasions and positionality in relation to the participants, the field, and larger social contexts [Johnson-Bailey, 2004; Morrow, 2005; Peshkin, 1988]), I used a self-reflective journal to document my evolving thought process and reflections as the study progressed (Morrow, 2005).

**Summary**

This chapter described the methodology of the qualitative discourse analysis study, which was grounded in the interpretivist paradigm, reflective of a constructionist epistemology. I provided an overview of the CDA tradition and explored the emergence of the PDA focus, a shift in research perspective aimed at highlighting transformative practices rather than locating manifestations of oppression in discourse. I described how I utilized Fairclough’s (1989) CDA approach, from a transformative PDA perspective, to answer to the guiding research question—*In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?* —in relation to the three sub-questions:

1. What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?
2. In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?

3. What institutional factors challenge and support culturally responsive/sustaining discourse practices?

Within this chapter I also described the methods, including information about the context, my subjectivity, the site and sample, and the informed consent and confidentiality procedures. I discussed the sources of data utilized and collected, including classroom video, documents, questionnaires, individual interviews, and analytic memos. I then detailed the multi-phase analysis that I undertook after selecting focal episodes of classroom discourse (i.e., texts). I additionally discussed how the credibility of the research was bolstered by targeting the trustworthiness criteria of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985), with an emphasis on the role of my own reflexivity throughout the study.

In Chapter 4, I provide a summary of the collected data and a brief snapshot of the participants and the learners in their respective classroom communities. I then explore the findings that resulted from analysis of each IC episode. In addition, I include a synthesis of findings to support a more comprehensive understanding of the research results.
Chapter 4 - Research Findings

In this study, I used PDA to explore the interactional dynamics between teachers and students in grade-level, CLD classrooms. I focused on exploring how elementary teachers who implemented BDI (e.g., Herrera, 2016, 2022) used discourse to invite and nurture student willingness to share about and maximize the sociocultural and linguistic dimensions of their biographies. In this chapter, I provide a summary of the data collected and a brief description of the participants and the learners in their respective classroom communities. I then explore the findings that resulted from analysis of each IC episode using Fairclough’s (1989) three-part progression: description, interpretation, and explanation. In addition, I include a synthesis of findings to support a more comprehensive understanding of the study results.

Summary of Data Collected

In this study, I drew primarily upon video of classroom lessons and two-part individual interviews. I reviewed approximately 10 hours and 45 minutes of video across nine lessons before selecting six lessons that would be utilized for this study. From this, I selected 11 episodes of IC across the three participants (average of 16 total minutes of IC per participant). Episodes were selected to include IC used with students in varying grouping configurations and to highlight a wide range of teacher discourse practices. I then created transcriptions that included the recorded language acts and key semiotic features (see Appendix G for transcription conventions). I subsequently analyzed each episode by applying Fairclough’s (1989) CDA approach. The transcription texts served as the basis for the description phase of analysis.

With regard to the individual interviews, the first portion involved video elicitation, in which the participant viewed IC episodes and then provided her perspectives on aspects of the exchanges that were significant for the facilitation of learning. During this time, I also was able
to share some of my interpretations, hear the teacher’s response, and ask clarifying questions, which allowed for in-depth member checking. This portion of the interview largely informed the interpretation phase of analysis. In the second portion, I utilized a semi-structured interview protocol to explore participants’ perceptions regarding institutional factors that influenced the use of biograph-driven practices, including ICs. Data from this portion informed the explanation phase of analysis.

Full interviews of two participants were conducted using the Zoom platform. For the third participant, the interview was split into its two component parts due to scheduling logistics. The video elicitation portion occurred first and was facilitated through Zoom. The second portion was conducted as a phone interview. Although the participant was not able to use Zoom, I utilized the platform to record the phone call for added process consistency across interviews. On average, individual interviews were an hour and a half in length. I transcribed each of the interviews and provided the transcriptions to the participants for an added layer of member checking.

Additional sources of data provided information about the teacher participants and the classroom communities. An original teacher profile (archived document) provided insights into the teachers’ positionality (e.g., demographic information, life experiences) during the academic year that the lessons were filmed. A current teacher questionnaire was collected to gather updated information regarding the participants’ positionality, which informed my conversations with participants during their individual interviews. Classroom community profiles (archived documents) for each teacher were collected to provide information about the learners in each video recorded classroom. In addition, I developed and used analytic memos throughout the data analysis process.
A Snapshot of Classroom Communities

In this section I provide a brief snapshot of each teacher participant and her classroom community. Information was drawn primarily from documents and profile questionnaires. However, some details were additionally gleaned from the individual interviews. Throughout the chapter, I use pseudonyms for teacher participants and for any other members of the classroom communities referenced by name. Participants were invited to choose their own pseudonym. Two participants elected to use the name suggested and one participated provided a partially modified name.

Abby Nelson

Abby Nelson was a 4th-grade teacher when her classroom instruction was video recorded. She identified as a European (Anglo) American who had lived in Kansas her entire life. She considered herself a monolingual English speaker. However, mission trips to Mexico had fueled her interest in Hispanic cultures and she had developed basic familiarity with Spanish. At the time her instruction was recorded, Abby had been a teacher for seven years, with all of her teaching years at her current school. She had previously served as a long-term substitute (K-2 Special Education) and as a K-5 paraprofessional. She had earned a Master’s degree and an ESOL endorsement. At the time of this study, she was still residing within 100 miles of where she grew up. She had transitioned to the role of K-5 ESOL teacher, a position for which her principal had encouraged her to apply so that she could provide mentoring support to additional teachers. It was the second year she was serving in this new role.

Among her 23 learners, 14 students (61%) were designated English language learners. Three students were receiving Special Education services and 1 student was receiving speech support. Twelve students were below grade level, 10 students were at grade level, and 1 student
was above grade level. Students were racially described as Hispanic, White, and Bi-racial (Black and White). Mexico was another home country represented, and Spanish was the native language of the emergent bilingual learners.

**Leticia Ramirez**

Leticia Ramirez was a 1st-grade ESOL teacher during the academic year when her classroom instruction was recorded. She identified as a Hispanic-American who had immigrated to the United States from Mexico when she was just under three years old. She had lived in the western side of the state through pre-Kindergarten before moving to the current community, where she has lived ever since. Leticia was a native Spanish speaker who took pride in her Hispanic heritage. At the time her instruction was recorded, Leticia had been a teacher for nine years, and she had worked at a total of four schools. She had previously taught Kindergarten, 1st grade (and 1st grade ESOL), 2nd grade, and 2nd/3rd grade combo. The lessons were filmed during her first year as a teacher at her current school. She had earned her Master’s degree and an ESOL endorsement. At the time of this study, she was serving as a 1st-grade teacher.

Leticia’s class of 17 learners included 10 students (59%) who were designated English language learners. Eleven students were below grade level and 6 students were at grade level. Students were racially described as Hispanic and White. Mexico was another home country represented, and Spanish was the native language of the emergent bilingual learners.

**Michelle Scott**

Michelle Scott was a 2nd-grade teacher when her classroom instruction was video recorded. She identified as a European (Anglo) American who had lived in her current Kansas community her entire life. She considered herself a monolingual English speaker. Interactions with her children’s daycare provider and other Hispanic members of the community had
increased her familiarity with Hispanic culture; she also had worked with a bilingual colleague to learn some basic Spanish skills. She considered herself an advocate of dual language learning and felt that she had even greater respect and empathy for emergent bilingual students after having discovered for herself how difficult it was to learn and speak a second language. At the time her instruction was recorded, Michelle had been a classroom teacher for eight years, with all of her teaching taking place at her current school. She also had previously served as a 1st-grade teacher. Michelle had earned a Master’s degree and an ESOL endorsement. At the time of this study, she was serving as a 2nd-grade teacher.

Among her 17 learners, 5 students (29%) were designated English language learners. Two students were receiving speech support. Seven students were below grade level, 4 students were at grade level, and 6 students were above grade level. Students were racially described as White and Hispanic. Mexico was another home country represented, and Spanish was the native language of the emergent bilingual learners.

**Findings from Positive Discourse Analysis of IC Episodes**

In this section, I provide the findings for each IC episode according to Fairclough’s three-part analysis progression. The analysis was undertaken from a transformative PDA perspective to answer the guiding research question—*In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?*—in relation to the three sub-questions:

1. What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?

2. In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?
3. What institutional factors challenge and support culturally responsive/sustaining discourse practices?

Each sub-question aligned to a corresponding part of the analysis: description (sub-question 1), interpretation (sub-question 2), and explanation (sub-question 3). Throughout the findings, I describe the description phase as “Digging into the Text.” I characterize the interpretation phase as “Exploring the Situation.” Finally, I label the explanation phase “Connecting to Social Practice.” These shorthand descriptions are intended to remind the reader of the general purpose of each phase. For a detailed description of each, refer to Chapter 3. Analysis of all episodes of a given teacher are grouped together. To support differentiation among episodes, I assigned a theme for each based on significant aspects of the recorded interactions. Table 4.1 provides the comprehensive order of episodes as an orienting frame for the organization of this section.

Exploring ICs from Abby’s Classroom

After reviewing four video recorded lessons (combined duration of approximately 5 hours and 3 minutes), I selected two lessons from Abby’s 4th-grade classroom as sources of data for further analysis. From these lessons, I chose four episodes of IC, two from each lesson. I will discuss each episode in turn.

Episode 1: Students as Learners and Experts

The first episode took place during an English Language Arts (ELA) lesson focused on performance arts. The previous week the students had used a DOTS chart to support their learning. The DOTS chart BDI learning tool was utilized in the episode as students continued to work with the ideas and apply them to the new purpose of conducting research on a self-selected type of performance. Students each had a white board and dry erase marker. The teacher, Abby, was addressing the group from the front of the room. She asked learners to reference their DOTS
Table 4.1. Themes Reflected in IC Episodes

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Episode</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>1</td>
<td>Students as Learners and Experts</td>
</tr>
<tr>
<td>Abby</td>
<td>2</td>
<td>The Power of Visual/Nonverbal Communication</td>
</tr>
<tr>
<td>Abby</td>
<td>3</td>
<td>Bridging from the Known to the Unknown</td>
</tr>
<tr>
<td>Abby</td>
<td>4</td>
<td>Learning through Reciprocal Exchanges</td>
</tr>
<tr>
<td>Leticia</td>
<td>5</td>
<td>Listening to Learners and Building Community</td>
</tr>
<tr>
<td>Leticia</td>
<td>6</td>
<td>Learning as a Shared Venture</td>
</tr>
<tr>
<td>Leticia</td>
<td>7</td>
<td>Allowing Students to Discover for Themselves</td>
</tr>
<tr>
<td>Michelle</td>
<td>8</td>
<td>Linking to Life Outside the Classroom</td>
</tr>
<tr>
<td>Michelle</td>
<td>9</td>
<td>Teachers as Learners Who Make Mistakes</td>
</tr>
<tr>
<td>Michelle</td>
<td>10</td>
<td>Using Gestures to Generate Ideas</td>
</tr>
<tr>
<td>Michelle</td>
<td>11</td>
<td>Showcasing Student Success</td>
</tr>
</tbody>
</table>

charts to identify words that might be used as they brainstorm types of performances. Appendix H provides the episode transcription. The subsequent sections detail the findings from each level of analysis.

**Episode 1 Description Phase: Digging into the Text**

Key features that influenced selection of this IC episode were translanguaging practices and shifts in teacher/student authority in relation to different ways of knowing. As Abby set the stage for the learning that would take place, she invited learners in by using inclusive pronouns (i.e., four uses of “we”, one “we’re”, four “our”, and one “let’s”). Especially concentrated use of such pronouns occurred in turns 1-11. She positioned students to successfully engage in the task
by asking known-answer questions: “Do we have different types of performances on our DOTS chart?” (turn 6) and “Okay, can we use those words to brainstorm on our whiteboard and marker?” (turn 9). The first of these questions reminded learners that they already possessed background knowledge on this topic. The second question encouraged students to use their learning tool to scaffold their written language production.

Throughout the episode, students were positioned as individuals who possessed knowledge that was useful to their current learning. Abby did this by frequently referencing the students’ DOTS charts (see turns 6, 11, 32, and 42), with the expectation that words and ideas were recorded there. She also frequently revoiced students’ contributions. The first instance occurred in turn 13 and revoicing was part of her typical response to learners who shared ideas. Abby revoiced what students said in 22 of her total 45 turns (49%). Abby’s expectation that innumerable types of dance, or types of performances in general, were possible sources for student contributions was evidenced in her use of “other” or “another” to elicit additional ideas (turns 53, 56, 67, 71, 93).

The word “danza” was particularly significant in this text. Manuel, an English learner who had recently transitioned from a newcomer program to this school, offered “danza” as a type of dance in turn 58. Abby responded with an imperative (“Okay, um, correct me if I’m wrong here, Manuel.”) as she wrote the word on the class DOTS chart, which she used to record contributions for the shared benefit of the classroom community. She followed the imperative with questions that placed Manuel in a position of authority (“Dansa? Like that?”) When Manuel corrected the spelling, she incorporated the edit in her writing. Her uptake of the word and immediate use of it in turn 69 as she continued with the larger IC further valued Manuel’s knowledge, which differed from her own. The import of the word for classroom learning was
additionally established when Abby incorporated *danza* as a highlighted example at the end of the episode in turn 93. In a similar way, turns 71-81 illustrated Abby attempting to revoice a student contribution shared in Spanish, despite her limited knowledge of the language and lack of familiarity with the word. She reached out to students and then incorporated their knowledge that the word (*zapateado*) was the Spanish word for tap-dancing.

Abby was careful to consider the relational impact of her use of discourse. When students in turns 16 and 22 offered ideas that did not match with her intended line of response, she used the modal auxiliary verb *could* (i.e., “could be”) to reflect a lesser degree of certainty rather than simply responding with a negative. Moreover, when Victor offered the idea of “Flemenco” in turn 62, Abby did not respond dismissively (e.g., *Someone else already said that.*). Rather, she said, “We have flamenco right here” as she physically pointed out for Victor and for the rest of the class where the idea had already been captured on the projected class DOTS chart.

**Episode 1 Interpretation Phase: Exploring the Situation**

Field, tenor, and mode can be used to describe the classroom situation that provided the context for this episode. To recap, the field can be characterized as an IC in an ELA lesson focused on the topic of performance arts. The purpose of the IC was to generate ideas surrounding types of performances (e.g., play, concert, dancing) from which students would choose two possible ideas to research. Key instructional processes in the social activity included the elicitation of connections to background knowledge and the revoicing of students’ contributions, both of which are essential to delivery of BDI lessons (Herrera, 2016).

The DOTS chart, a BDI strategy (Herrera et al., 2017), was used to mediate learning throughout the episode. By using the DOTS chart as a scaffold to support learning from one week to the next, Abby demonstrated for students how their background knowledge, built both
outside school and inside the classroom, served as the foundation for subsequent learning. Students activated what they knew by referencing their DOTS charts. They selected ideas that responded to the purpose of the lesson activity (brainstorming for the benefit of their individual learning, which they recorded on the white board) and simultaneously contributed to the brainstorming of the whole class, which Abby documented on the projected DOTS chart.

Throughout this process, Abby supported students with modeling. BDI teachers use modeling to support students’ comprehension and application of concepts, skills, and language; they also use modeling to foster learners’ development of metacognition (Herrera, 2016). As Abby noted in her interview, modeling was central to this episode.

Modeling thought processes, modeling organization, modeling how... “This is what good writers do... just kind of giving them those, those tips that, you know, would help them be successful... And then the collection of ideas. Showing them... modeling of that thought process of how I would use this chart to pick out some things I might be interested in.

Through the instructional conversation, students were guided to see how the ideas recorded on their DOTS charts had relevance for the current lesson.

With regard to tenor, the subject positions included teacher (Abby), ESOL teacher (whose contributions appear in turn 20, 23, 25, 39, and 84), and student. As discussed in the description phase, Abby used language to foster a sense of community. She created a classroom ecology that encouraged the sharing of ideas and risk taking; all ideas were welcome (Herrera, 2016). There was evidence that students interpreted the classroom as a safe place because they shared ideas/words from their background knowledge (e.g., ballet, flamenco, salsa, tap-dancing, tango, freestyle, line dancing, breakdancing). They also contributed words in both English and
their native language (e.g., *danza, zapateado*); in other words, they engaged in translanguaging (Herrera, 2022).

The teacher made herself vulnerable by attempting to revoice words in other languages. She turned to students to inform her and thus attributed to them the authority typically reserved for teachers. She reflected in the interview on her attempts at using Spanish in the classroom.

I think when you put yourself in that position [of being a second language learner] too, it's like it's a mutual we're all learning here. I'm learning from you. You're learning from me. We're learning from one another. (laughs) There's going to be things I don't know. I can ask you. You can help me. We both might [not] know. Well, then we can use a different resource to figure it out, but . . . making yourself vulnerable helps them make themselves vulnerable. When they see you trying and making mistakes, then they're okay trying and making mistakes.

This type of interaction highlighted how the teacher and students collaborated to disrupt the typical teacher–student script (Fairclough, 1989; DiGiacomo & Gutiérrez, 2017; Gutiérrez et al., 1995). In this classroom, all members of the community could at times be teachers and at other times be learners. By allowing students to use their native language to share personal connections to the topic and then affirming those connections through verbal revoicing, written recording of ideas, and conversational uptake/appropriation (de Oliveira et al., 2020), Abby demonstrated in concrete ways her commitment to maximizing and sustaining the students’ languages (Herrera, 2016; Paris, 2012).

The mode of the situation indicated that language played a constitutive role—using and sharing language was the primary type of interaction taking place during the IC. The exchanges included spoken language and written language on the part of both the students and the teacher.
Abby also used gestures to increase comprehension (e.g., held up two fingers), to encourage engagement and affirm contributions (e.g., smiled, nodded), and to support idea generation (e.g., acted out tap-dancing).

Abby asked open-ended questions and called on specific students to encourage participation of learners. By continually directing students to refer back to their DOTS charts, she promoted the active engagement of all class members in the learning process. Students who did not speak could still use the DOTS chart as a “tool in the hand” (Herrera et al., 2017, p. 149) to cognitively engage with concept of performances and use related written language.

**Episode 1 Explanation Phase: Connecting to Social Practice**

In the context of the United States, English is the language of power. It is the dominant language for communication in most spaces, including public schools. Government funding practices, state educational language policies, and national sentiment all have played a role in the degree to which English learners are prohibited/encouraged to use their native language in the classroom (Gandara et al., 2010). Through this episode, Abby actively sought to sustain the languages of CLD students (Paris & Alim, 2014) and to increase the status of such languages in the classroom. The results of her efforts were evidenced in students’ use of translanguaging (García, 2017) as they engaged in classroom activities designed to activate and leverage their background knowledge.

As a White, native English speaker herself, Abby’s attempts to utilize other languages within this IC demonstrated her willingness to be humble. Freire (1970/2005) wrote candidly about the need for humility in dialogue, “At the point of encounter there are neither utter ignoramuses nor perfect sages; there are only people who are attempting, together, to learn more than they know now” (p. 90). Recognizing differences between her own positionality and that of
her students, Abby allowed herself to be vulnerable, which fostered trust within her classroom. Such trust created safety within the learning space that allowed for risk-taking as students shared aspects of themselves and their experiences (reflective of their biopsychosocial histories and biographies [Herrera, 2016, 2022]), engaged with curricular concepts, and used their existing and developing language skills.

This episode also illustrated how Abby positioned the members of the classroom community. Rather than seeing students as receivers of knowledge that she could impart, Abby positioned students as experts, especially with regard to their native languages. This interactive positioning (Harré & van Lagenhove, 1999) was accepted by students, who supplied the correct spelling for *danza* and explained to Abby that *zapateado* meant the same thing as tap-dancing. Again, these interactions reflected the commitment of the classroom community to learn *together*. As she demonstrated through her conversational uptake of students’ words and ideas, Abby embraced the position of learner that she assigned to herself.

**Episode 2 The Power of Visual/Nonverbal Communication**

The second IC episode that featured Abby’s classroom was drawn from the same ELA lesson on the topic of performance arts. In addition to using the DOTS chart, students in this portion of the lesson were working with the U-C-ME strategy template. The goal of the focal task was to (a) select words/details from the DOTS chart that were relevant to their chosen type of performance and (b) add those words to the center of their U-C-ME template. Students were working in their small groups to complete the task. The teacher was circulating among the groups to provide additional support as needed. The episode transcription is provided in Appendix I. The subsequent sections summarize the findings from the three levels of analysis.
**Episode 2 Description Phase: Digging into the Text**

This IC episode was selected primarily because of the teacher’s prevalent use of visual/nonverbal communication to support learning. The episode included three basic structures: support provided to a small group (turns 1-14), support provided to an individual student (turns 15-19), and whole group discussion (turns 20-34). For the most part, second person pronouns (i.e., you, yours, your, you’re) were used throughout this episode (23 total instances versus 3 instances of inclusive pronouns). The shift in pronoun use reflected the shift in ownership of the task to learners as Abby guided them to think about their specific choices of words.

Visual/nonverbal communication was especially influential in the teacher’s interactions with students during this episode. Proximity and physical connection, for example, played a pivotal role in this episode even before the first actual turn in the text. When Abby stopped at the first small group, she initially focused her attention on Raúl, who was off task. Abby placed her hands on Raúl’s shoulders in a manner that indicated she wanted to both reassure and refocus him. In turn 1, she then crouched beside Raúl to further minimize the physical distance and to come level with him. She also reached around Raúl to locate his DOTS chart and placed it in front of him. Proximity further factored into her later interactions with Kendra (turns 15-19), as Abby crouched beside her while she provided individual support.

Gaze was another type of visual/nonverbal communication that Abby employed. Her interactions with Raúl quickly turned into a conversation with the entire small group. Much of the turn-taking throughout her time with these particular learners involved her purposeful use of gaze. Turns 1, 4, and 6 highlighted how Abby included Susana, Diego, Rose, and Raúl in the discussion, shifting her attention at different points to different students and then routinely returning to Raúl.
Direct modeling of the task was accompanied by Abby’s use of gestures, such as pointing to specific words on students’ learning tools (turns 1, 4, 15, 17). She also included a reference to how another student has approached the task (turn 1). The primary way that Abby verbally spurred students’ understanding of the task was through the use of close ended questions (e.g., “So, does ‘abilities’ relate to yours?” “Are they going to have an audience?”). Turns 4, 6, 10, 15, and 17 illustrate how such questions served the purpose of providing students with possible examples.

Even in the course of very focused conversation, Abby included humor to lighten the mood and foster relationships with students. She made a self-deprecating remark when interacting with Diego in turn 12. Diego had just confirmed that a person would have to possess “abilities” to breakdance. Abby revoiced his response and then added, “Ms. Nelson [referring to herself] can’t go breakdance, that’s for sure.” Smiling and laughter were part of the exchange as Diego informed her that he could not breakdance either.

The episode concluded with Abby bringing the class back together. She referenced observations made throughout the time that she circulated among groups. Specifically, during turns 24, 26, and 28, she reiterated for the class particular words that would be applicable to any type of performance (i.e., ability, effort, skill).

**Episode 2 Interpretation Phase: Exploring the Situation**

In this episode, the field remained an IC in an ELA lesson centered on the topic of performance arts. The purpose of the IC, as manifested during the teacher’s interactions with a small group, an individual student, and the whole class, was to identify words from students’ previously documented knowledge about the topic that would be applicable to their selected examples of performances. Modeling of how to approach the task and use of questioning were
the predominant processes employed by the teacher. Both processes play key roles in supporting learners’ comprehension and cognitive processing (Herrera, 2016).

During this episode, BDI tools of mediation included both the DOTS chart and the U-C-ME template (Herrera et al., 2017). The teacher’s repeated reference to students’ DOTS charts demonstrated her belief in their utility for the learning process. Asking students to select words from the DOTS chart, which captured their ideas from the previous week, facilitated activity connection and further demonstrated how prior learning provides the foundation for ongoing learning.

The tenor of the situation reflected subject positions of teacher and student. In this episode, Abby demonstrated care and developed relationships (Herrera, 2016) through her willingness to be physically close to the students with whom she was interacting. She used physical touch as well as proximity and lowered herself physically to the level of students by crouching next to them. Her efforts to look directly at students allowed her to connect with them at a socioemotional level. Through such efforts, she attended to the biological, psychological, and social needs of learners (i.e., their biopsychosocial histories) (Herrera, 2016, 2022). Abby commented in the interview about her interactions with Raúl. She shared that although he was a learner who had behavioral challenges, he was always able to be successful in her classroom. As she noted, “yeah, he might be a little off task, but you know, I go over and just get him right back on.”

Abby also fostered a warm classroom ecology by infusing humor in the conversation. In the instance previously described, Abby made it clear that breakdancing was not a type of dance with which she had personal experience. She and Diego were able to share this bond of similarity with regard to their lived experiences. Research (e.g., Bieg, Grassinger, & Dresel, 2019) supports
the use of humor for learning especially when it is connected to the content, as it was in this instance. Laughter is also an aspect of the biography-driven perspective on the sociocultural dimension (Herrera, 2016). Abby shared, “My favorite thing about fourth and fifth grade is like you can throw those little like slide jobs, or you know even at yourself, or whatever, and they get it and they laugh at it and it’s fun.” Teachers keep the joy of learning alive and build rapport with learners through small moments such as this.

In this episode, the mode included language playing a pivotal role. The teacher and students read examples of previously written language documented on students’ DOTS charts. Students also used written language to record on their U-C-ME template the words that were relevant to their chosen type of performance. Spoken language was used by the teacher as she collaborated with learners to bolster their understanding and increase their engagement in the task. Students used spoken language to offer ideas and answer questions. Abby’s general responsiveness to students’ contributions was pivotal to their willingness to use language. Abby explained,

They know like, “Okay, I can throw a word out there and she's going to take it, and she's going to help me figure out what I want to do with this word.” That was kind of that relationship we had.

Abby nurtured language and conceptual learning by honoring the words and ideas that students shared. She harnessed the power of those contributions, as encouraged in BDI (Herrera, 2016), by using them as building blocks to foster increased understanding and more advanced use of language connected to the curriculum.

Visual/nonverbal language (Herrera, 2016) further played a significant role. Abby used proximity, gaze, and gestures to engage more deeply in joint productive activity (CREDE, 2021)
with the learners. Gaze additionally served as a conversational management technique, which Abby used to involve learners in the conversation. It is noteworthy that Kendra, the student who received individual support, also used nonverbal communication to respond to the teacher’s questions. Abby did not pressure Kendra to use spoken language. Rather, Kendra’s nods and smiles were effective for the communicative task at hand. Allowing learners to engage in the conversation at their level of comfort was a further indication of Abby’s focus on the goal: supporting students to engage and successfully complete the task.

**Episode 2 Explanation Phase: Connecting to Social Practice**

CLD students frequently are perceived from a deficit perspective (Kressler & Cavendish, 2020; Shim & Shur, 2018), Othered in schools that perceive English learners as a group to be physically and socially set apart from the rest of the student body (Herrera et al., 2022; Shapiro, 2014), and racially or ethnically pathologized (Ray, 2022; Steketee et al., 2021). The interactions in Abby’s classroom that are evident in this IC episode stand in stark contrast. Abby’s use of proximity, gaze, and language instead reflected the relational care (Noddings, 2013) that she had for the members of the classroom community. Through her IC words and actions, she created a “culture of encounter and kinship” (Herrera et al., 2020, p. 61) that was reflective of authentic cariño (loving care) (Curry, 2021; Valenzuela, 1999). Abby attended to students’ biopsychosocial histories (Herrera, 2022) as she built upon their assets (e.g., background knowledge) to achieve standards-based academic expectations. Her interactions with Raúl were illustrative. In this classroom, each learner was valued and supported to engage in the learning process. Through her interactions, Abby nurtured learners in ways that fostered individual belonging and a collective sense of community.
In her interview, Abby discussed the learner-centered nature of her instruction. She connected her ability to teach in biography-driven ways to administrators who communicated the message: “Do what’s best for kids.” In her district, it was “Students, standards, strategies, curriculum.” She explained,

Students are first. You think about the students, then you say, “Okay, well, what are the standards? Okay, now what strategies can I use to get these students [a particular group of students, rather than a hypothetical homogenous group of learners] to that standard? Okay, those strategies work. Now what's the curriculum? What stories do we have? What kind of work do we have here? How will that fit my strategies for my, you know, standards and my students?” So that has to come from administration.

Abby perceived that she had the full support of her district and school administration to engage with students in biography-driven ways. She also tied this support to her own position, describing how her current role as an ESOL teacher affords her daily opportunities to mentor other teachers into utilizing more culturally responsive practices.

**Episode 3: Bridging from the Known to the Unknown**

The third episode selected from video recorded lessons in Abby’s classroom again took place during an ELA lesson. The essential question that provided the focus for the week was, How do people from different cultures contribute to America? Abby went over the vocabulary words for the week, which included reading sentences from the text that incorporated the vocabulary words. Students were provided time to activate their background knowledge using their individual DOTS chart. While students were working, the teacher observed what students were writing and recorded ideas on her clipboard. Learners then had the opportunity to share their documented ideas with their teammates. They were also allowed to add words they got
from peers to their own DOTS chart. Episode 3 picks up when the teacher has brought the class back together. The transcription for this episode is provided in Appendix J. The findings from the three levels of analysis follow.

**Episode 3 Description Phase: Digging into the Text**

This episode was selected for analysis because of the degree of emphasis the teacher placed on students’ individual and shared ways of knowing as they engaged with the topic. In this episode, the teacher positioned students as the knowers—those who possessed knowledge needed for the learning of the class. Evidence of this can be found, for example in the turns 7 and 11. Abby referred to words that she chose to highlight from among those students recorded on their DOTS charts saying, “[T]hese are just words that I collected from you ((gestures to the entire class)) that I thought were excellent and were going to be helpful for, uh, this week’s reading” (turn 7). The teacher explicitly located students as the source of the ideas that were going to be used to further the learning process. In turn 11 she shared with the class, “I like this word [leather] I got from ((points to student)) Ricardo.” In this case, Abby positioned Ricardo as the giver and herself as the receiver.

Abby was cognizant that students might wonder about the value of their background knowledge if specific words they had written were not among those she revoiced and added to the collective class DOTS chart. She used a series of targeted, known-answer closed questions to affirm the value of all background knowledge connections: “Am I going to have every single word that you have?” (turn 1), “Does that mean your words are wrong?” (turn 3), “Does that mean you need to take anything off your chart?” (turn 5).

Through this IC episode, Abby validated the knowledge and ideas that students shared. She did this through her frequent use of revoicing, which occurred in 12 of her 28 turns (43%).
In turn 9, she also referenced a conversation that she had with one small group of learners, noting that they had connected the word “boat” to “canoe.” She asked the class collectively to use this more specific term for boat during the week. Her invitation for learners to join in this intentional use of the academic vocabulary word was predicated on Andrea sharing her initial connection, “boat.” This connection became a focal point for learning within the small group and later for the whole class.

At various points during the episode, Abby referenced additional experiences shared by members of the classroom community. “‘Cause we knew from the past” (turn 7) was used to remind students they had previously learned about Native Americans using animal skin to make clothing. In turn 9, her revoicing of “beads” included the elaboration, “We remember Miss Stevens talking about how she made her own beads or had to trade for beads.” In this instance, she encouraged the class to make links to what a visitor had shared about Native American culture with the class. Abby also referenced the class discussion about the target vocabulary, noting “And a word we kind of talked about ((gestured toward the back of the room)) back at the focus wall that I saw a lot of us use was ‘natural resources’” (turn 13); a similar reference in the same turn was made to “river.” Abby made another connection to the presentation by the class visitor by asking, “. . .and who remembers Miss Stevens singing and dancing for us?” (turn 13).

In turn 49, Abby’s words rest on the premise that students have the knowledge needed to make a multitude of connections between words, and that different ways of knowing and thinking about the words are equally valuable: “So you can make all kinds of connections ((gestures “more and more” using hands)), whatever connections you’d wanna make . . . .” Toward the end of the episode, Abby explicitly commented on the knowledge that the classroom community possessed (turn 61, “It’s very clear that we have some background knowledge about
Native Americans.”). In the same turn, she also emphasized that this knowledge would serve as the basis for upcoming learning (“we’re definitely gonna grow that knowledge this week”).

**Episode 3 Interpretation Phase: Exploring the Situation**

The field of Episode 3 is reflective of a whole-group IC in an ELA lesson focused on the topic of Native Americans. The purpose was to support students to make (a) background knowledge connections to the topic, (b) links between different words from their background knowledge, and (c) connections between students’ words and the focal academic vocabulary words for the week. These goals are reflective of the processes associated with the DOTS BDI strategy (e.g., Herrera, 2022). This IC illustrated the importance of teachers observing students’ production of language and ideas (i.e., situational awareness) (Herrera, 2016). Without first noticing and documenting what students produce, teachers are unable to engage in ICs such as that illustrated in this episode. Abby harvested words and ideas from what students documented on their DOTS charts and discussed with peers in their small groups so that she could then highlight selected contributions to further the learning of the larger classroom community.

Abby discussed the social-emotional/psychological considerations that factored into her process as she picked up students’ words to highlight with the whole class.

One of my most favorite things to do was to walk around and gather the students’ ideas so that the words that . . . I was using, that the class was using, were, they were knowing they were coming from their peers versus me. And I also really enjoy like saying the person's name that it came from . . . A lot of the kids’ names I purposefully said are more of the kids that maybe don't have a lot of things to share often, or are a little bit lacking in the academic spectrum, or, you know, just have maybe not a great attitude about learning or not as, you know, like gung-ho about doing all these fun activities . . . When kids don't
feel like they belong, they shut out, they shut down. It's like, it's immediate like, “I'm going to react. I'm going to act up. I'm going to do anything I can to get out of here. I don't belong in here. I want to do something.” And so I feel like the way that . . . if you walk around and you gather each kid’s ideas . . . and then you say like, “Oh, [student name] shared this word. I thought that was great,” and I mean like, you're bringing them in to the classroom and you're making them feel like, “Oh, wow! I contributed something,” like “I contributed that to my class. I'm doing that.” So, you're really giving them the sense of belonging and like . . . “I'm important. My class needs me.”

It is this orchestration of learning, of bridging between what students know and the target concepts and language of the lesson (Herrera, 2016), that Abby demonstrated in this episode. The instance in which she scaffolded language from a student’s contribution of “boat” to the target word “canoe” also illustrated how teachers can naturally build from what learners produce. Abby used the students’ conversational language (i.e., BICS) to bridge to the academic language of the curriculum (i.e., CALP) (Cummins, 1981). This bridging between BICS and CALP is a conversational move emphasized in BDI (Herrera, 2016).

The DOTS chart (e.g., Herrera et al., 2017) served as a mediation tool for the learning of individual students and for the whole group. Students each had their own DOTS chart that served as a repository of their connections to background knowledge. This learning tool provided students with a scaffold for language production as they participated in the class conversation. A class DOTS chart was further used to document the collective ideas and learning of the group. Abby revoiced words and documented them on the projected DOTS chart so that learners could add them to their individual charts if they had not done so already.
Throughout the IC, Abby also referenced connections between and among words, and modeled physically drawing the connections. Through such actions, Abby affirmed the connections students made between their own knowledge systems (i.e., funds of knowledge, prior knowledge, academic knowledge) and the topic (Herrera, 2016). Her references to shared learning experiences further supported students’ ongoing activation of ideas and connections among words/concepts (Herrera, 2016).

The tenor of the situation reflected in (and made possible by) the IC included the subject positions of teacher and student. The teacher minimized social distance by using a variety of inclusive pronouns (e.g., we, our, us), in addition to second person pronouns (e.g., you, your). Through her instructional conversation, Abby positioned students as capable learners and contributing members of the classroom community. She emphasized the power and potential of their ideas by incorporating their words into the whole-class conversation. During the interview, Abby described the significance of this conversational move, after having provided students with an opportunity to activate and document what they know.

I find one thing [on the DOTS chart] that's really stand out. Yeah, you could have eight words on there that [at initial glance] have nothing to do with anything but I found one word, and I can . . . highlight you in front of your classmates and then they can be like, “Oh wow! Great word!” . . . and that's where I felt like that creating that classroom community this, this activity [DOTS strategy], really, really helps.

Through her observation and awareness of what students documented, Abby was able to highlight the contributions of individual learners. This type of affirmation supports students’ development of a positive self-concept within academic spaces (Herrera, 2016).
The tenor of the situation was further influenced by the previously described references to shared experiences. Abby’s connections to shared group experiences reinforced the social cohesion of the class. She also allowed for learners to share at will rather raise hands or wait to be called on after she opened up the conversation by asking the open-ended question, “[W]hat are some natural resources that we have on our DOTS chart that we could connect to?” The informal type of exchange that resulted provided evidence of students’ comfort to engage with the teacher about the topic.

The mode of the situation reflected the constitutive role of language. The teacher and students used primarily spoken and written means of communication. A noteworthy exception was Abby’s use of visual/nonverbal communication to connect with and affirm a student who interrupted her while she was revoicing connections for the class. In the exchange, Abby shared with the class, “Someone wrote animal bones. I thought that was excellent because we know they use a lot of things.” In his excitement at having his idea revoiced (Herrera, 2016), Victor raised his hand and interjected: “That was me!” Although the teacher could have responded with irritation, she instead winked and nodded at him to communicate that she knew he was the contributor. Abby then verbally affirmed him (i.e., “Good, Victor”). This type of interaction supported Abby’s creation of a classroom ecology that attended to students’ socioemotional needs and created a safe space for engaging in the learning process (Herrera, 2016).

**Episode 3 Explanation Phase: Connecting to Social Practice**

Deficit perspectives held by teachers and enacted toward English learners can leave students feeling perceived as “dumb” or “stupid” or that they “know nothing” (Shapiro, 2014; Shim & Shur, 2018). Such learning environments fail to support students to develop a positive self-concept (Mercer, 2011; Sousa, 2017) as a learner. On the other hand, when teachers such as
Abby utilize culturally responsive/sustaining practices (Herrera, 2022), they actively seek to bolster the student’s concept of self as an individual who is capable of academic learning (including language learning). In such spaces, CLD students also perceive themselves as valued members of a community of learners.

Opportunity structures, conceptualized by Gray and colleagues (2018) through an ecological perspective, refer to elements of the classroom or school environment that either satisfy or thwart a learner’s need to belong. One type of such structures, instructional opportunity structures, are characterized by academic tasks and activities that uphold or strengthen the cultural meaning systems that learners bring to the classroom (Gray et al., 2018). In this episode, Abby’s use of the DOTS chart can be considered a type of instructional opportunity structure that she used to bolster students’ sense of belonging. She purposefully observed students as they documented connections between the topic and their own knowledge systems (i.e., funds of knowledge, prior knowledge, academic knowledge) (Herrera, 2016). She then selected specific connections that she used for advancing the learning of the classroom community. Abby’s discussion of this decision-making process (described in the previous phase) confirmed her intentionality to promote students’ positive self-concept through IC interactions.

Despite her demonstrated ability to effectively engage and support emergent bilinguals, Abby spoke about the external pressures that teachers frequently feel as they strive to meet learners where they are.

[T]he downfall is the district and state’s continual just mandating of where kids need to be, and what the expectation is, and what the testing scores need to be, and where they're falling behind . . . those types of pressures then make teachers feel less comfortable being able to go at their pace and meet the kids really where they're at. And they feel like they
have to bring the kids to where the standard is versus meeting the kids where they're at and getting them to the standard.

Abby additionally problematized the standard against which CLD students are measured. Her frustration was apparent as she critiqued the common narrative surrounding achievement outcomes.

You know, we [educators at large] keep talking about these kids [emergent bilinguals] that have [are], you know, “so far behind” and “so far behind”--behind who? Behind what? What, what are they behind? Who are they behind? . . . Did you pick like this middle-income White child that speaks English perfectly and then say, “Okay, this is the standard that you need to be?” . . . They're not behind. They're there. They're where they're at.

In this excerpt, Abby questioned the ideological underpinnings of a hegemonic education system (Apple, 2019; Giroux, 1983, 1992; Gutierrez & Larson, 1994) that continues to yield inequitable academic outcomes nationwide for learners who bring non-dominant/marginalized cultures, languages, and literacies to the classroom (Alim & Paris, 2017; USDE, n.d.). She later explained that many of the teachers in their building are ESOL endorsed, and they know what practices are best for emergent bilinguals. She was adamant that all students stand to benefit if teachers implement BDI, because “it's not just best for your ESOL kids, it's literally best for every child.”

**Episode 4: Learning through Reciprocal Exchanges**

The fourth and final IC episode from Abby’s classroom also took place during the ELA lesson focused on the essential question, “How do people from different cultures contribute to America?” After students had finished activating their background knowledge about the topic using the DOTS chart, they recorded connections between their background knowledge and the
target vocabulary words using the Vocabulary Quilt BDI strategy. Students separated into small
groups to either read with the teacher (or another adult) or read independently. Episode 4 takes
place while a group of students is working with the teacher to read the text. Appendix K provides
the transcription for the episode.

**Episode 4 Description Phase: Digging into the Text**

This episode was selected for analysis due to the joint sharing of ideas between the
teacher and students as they negotiated meaning. It featured a back-and-forth exchange between
the students and the teacher as they considered a portion of the text related to the word
“territory.” In turn 13, Raúl offered that for this vocabulary word, he drew a connection (i.e., “I
just draw (xx) a little hut. . .”). Abby elicited elaboration by asking, “And why did you draw
that? What were you ((makes a circular motion with her hand near her head)) thinking?” Raúl
articulated his rationale (turn 15), “What I was thinking, of, like (xx) guarding a territory so,”
and Abby jumped in to revoice and prompt responses from the group of learners, “So, like they
were guarding their ((pauses for students to join in)),” and Jasmine responded, “land.”

When Victor reiterates in turn 19 that “land is territories,” Abby pushed students to think
more deeply by asking, “But what does, is it just any land?” Use of the adjective “any” prompted
students to consider distinguishing characteristics about land that defines the vocabulary word
“territory.” While other students responded in the negative to her question, Victor offered the
qualification in turn 23, “It’s your land.” The teacher revoiced by rephrasing Victor’s
contribution to elicit students’ use of the related verb “own” to demonstrate possession. Abby
further revoiced “own” for the group in turn 30.

As the episode continued, the teacher used gestures to support student comprehension
(see for example turns 38, 43, 48, and 50). Students likewise frequently engaged by using
gestures of their own. For instance, in turn 45 Patricia mimicked Abby’s hand gesture to communicate the shrinking size of the Native Americans’ territory. She similarly used gestures in turn 48 to illustrate a small amount. At four places in the IC episode (turns 16, 24, 27, and 38), Abby intentionally paused her speech to allow students to fill in the blank. She also asked questions to spur critical thinking (e.g., “Why? Why would he want that?” in turn 58). Another characteristic of this IC that highlighted the organic nature of the conversation was the presence of multiple instances of overlapping speech as students engaged to share their contributions (see turns 6, 42, 53, 57, 60).

During this conversation, Abby additionally made a point to discuss the loss of land for Native Americans. In turn 50, she mentioned the various groups that came to the United States from other parts of the world. Although she easily could have stopped there with a simple reporting of facts, she instead used language that implicated all non-Native groups of people in this loss of territory: “. . . and then we just started kind of taking over, didn’t we? ((students nod)) Taking their territories.” Use of the inclusive pronoun “we” made it clear that Abby included herself as a member of a colonizing group. The verb “taking” implies that immigrants to the United States took possession of land that was not theirs.

**Episode 4 Interpretation Phase: Exploring the Situation**

In Episode 4, the field reflects a small-group IC in an ELA lesson centered on the topic of Native Americans. The purpose of the IC was to support students’ understanding of the vocabulary word “territory” in the context of the grade-level text. To scaffold their learning, students were using individual Vocabulary Quilts (Herrera et al., 2017) as their “tool in the hand” (Herrera et al., 2017, p. 149). Their background knowledge connections were recorded on the quilt prior to this IC. In the course of the current exchanges, students added ideas and
connections to the quilt to record their evolving understanding of the concept. Through their interactions together, the teacher supported students to confirm/disconfirm (Herrera, 2016) their initial ideas to the vocabulary word based on their understanding of the text. The background knowledge ideas that students contributed to the small-group IC (e.g., Raúl’s illustration of a hut) added to their collective learning. Abby used Raúl’s contribution, for example, to revoice the idea of guarding something, further prompting students to identify that something as land.

The tenor of the situation in this IC included the subject positions of teacher and student. Abby was able to minimize physical distance, given their seating at a horseshoe-shaped table. Social distance between herself and the students was minimized through her periodic incorporation of inclusive pronouns. In addition, she allowed for informal engagement patterns. Turn-taking was natural and included overlapping speech by the members of the group. This type of reciprocal exchange (Herrera, 2022) differed from more formal turn-taking processes typical of classrooms (e.g., students raise hands to indicate their desire to contribute to the conversation and then wait to be called on by the teacher).

The overall tenor of the IC was indicative of joint productive activity (CREDE, 2021), which deviates from more the traditional teacher–student classroom script (Fairclough, 1989; DiGiacomo & Gutiérrez, 2017; Gutiérrez et al., 1995). In this type of learning situation, the teacher and the students collaborate to achieve the learning goals of the lesson (Herrera, 2016). Abby described in the interview how she used what students produced to orchestrate the instructional conversation.

[You]ou can probably hear and tell, but I drive the conversation from their ideas.

Everything is driven from what they say. And then I kind of add to it, and then another kid pops in. “Yeah, okay, let's keep…” And then, “Oh..” And then I give them
something else to ponder and think about and, “How can we change that? How can we add that?” And so, um, that activity in particular, you know, we're trying to dive into the main idea, but there are tiny parts above the main idea that if they don't truly understand they can't reach that part. So it's like starting at those tiny parts and sprinkles of, I call “sprinkling in, sprinkling in” until all of a sudden it's like the sprinkles have filled the hole and you're now, you know, you're now where you need to be to explode your knowledge of what you want to say. So that's kind of what we were doing there. . . . They truly feel like they're a part of the learning and they are the learning. . . . I just basically started the conversation with, “What did you draw for territory?” you know, and then let you [students] lead from that, and whatever you say, I'm going to draw, I'm going to pick up on and I'm going to take that and continue diving, you know, deeper until I get where I wanted to be.

This back-and-forth, ebb-and-flow of conversation is illustrative of what it means for teachers to be culturally and linguistically responsive to students (Herrera, 2022). Although the teacher can create the context for interactions to occur, the actual exchanges cannot be pre-planned, but instead flow from the natural expression and exchange of ideas.

Abby also enforced expectations for respectful behavior (e.g., listening to peers who are speaking) to ensure learners had the opportunity to engage as equal members (Herrera, 2016). Her critical description of the colonization that occurred in the United States and that resulted in loss of territory for Native Americans was noteworthy because it communicated to students that critique of historical actions is acceptable in the classroom. Her implication of herself as a member of a colonizing group further solidified her openness to viewing society with a critical lens. This type of stance is reflective of culturally sustaining pedagogy (Paris & Alim, 2014).
The mode of the situation in which this IC took place reflected the primary role of language. Although Abby used primarily spoken language, the group together interacted with the written text, and students used written language to document their learning related to the vocabulary word. Students also used nonverbal means of communication. Illustrations were equally valued by the group members as a means of expression. Gestures also complimented speech, and at times students used them as their sole mode of communication for a given conversational turn. Herrera (2016) encourages the use of both types of nonverbal communication. Abby employed multiple techniques to foster engagement by all learners. For example, she asked a variety of questions that prompted students to articulate their thought processes (Herrera, 2016). She also revoiced and built upon student contributions; these conversational practices likewise are key to effective BDI (Herrera, 2016).

Episode 4 Explanation Phase: Connecting to Social Practice

The typical teacher-student script in U.S. classrooms includes teachers as givers and students as receivers of knowledge. Conversational patterns frequently reflect initiation-response-feedback (IRF) (Sinclair & Coulthard, 1975) sequences, which restrict the contributions of students in classroom talk and limit their total amount of talk time. Teachers also tends to maintain a rigid focus on the curriculum with little (or no) regard for students’ personal connections, not to mention possible tensions or contradictions in society related to the curricular concepts.

By contrast, during this episode, the teacher and students engaged in a reciprocal exchange of ideas that was characteristic of dialogic teaching (Applebee et al., 2003). Abby allowed learners to utilize both linguistic and non-linguistic representations to support their background knowledge connections to the academic vocabulary words. The ideas recorded on
the Vocabulary Quilt then served as a scaffold for students’ participation in the IC. All members of the group contributed knowledge and ideas in service to the group. Both the manner in which participants engaged in conversation and the content (e.g., critical stance toward U.S. colonization of indigenous territory) of the conversation was indicative of third space (DiGiacomo & Gutiérrez, 2017; Gutiérrez, 2008; Gutiérrez & Johnson, 2017).

Abby perceived institutional factors to both promote and inhibit this type of IC from occurring in the classrooms. She indicated that, at the time of this study, development of learners’ oral language skills was a district priority that supported a focus on increased opportunities for classroom talk. On the other hand, she noted that the district also wanted teachers to utilize a scripted program, which she contrasted with actual teaching: “Teaching is where you take a concept, you take ideas and--what you just saw in the video--you have a classroom community and teachers and students alike come together and everybody learns. That's what teaching is.” Abby explained that more tenured teachers often are better able to balance competing instructional demands/pressures, while new teachers generally feel less comfortable to push the boundaries of what is possible with regard to instruction for CLD students.

**Exploring ICs from Leticia’s Classroom**

After reviewing three video recorded lessons (combined duration of approximately 2 hours and 33 minutes), I selected two lessons from Leticia’s 1st-grade classroom as sources of data for further analysis. From these lessons, I chose three episodes of IC. Findings from the analysis of each episode are the focus of discussion to follow.
Episode 5: Listening to Learners and Building Community

The first episode from Leticia’s classroom featured an IC that took place in an ELA lesson that addressed arts with a focus on music. At the start of the episode, the class was seated on the carpet at the front of the room and Leticia was standing on the left-hand side of the space holding Linking Language posters. One of the posters had a heartbeat image, like that which might be found on a heart monitor. The other poster had a picture of a man riding a unicycle. Learners then joined other members of their assigned small groups and sat at various places on the floor. The teacher circulated among small groups to observe the connections to background knowledge that students were documenting and recording on the Linking Language posters. Leticia periodically addressed all learners to provide directions about next steps, such as how to link similarities in documented connections. Appendix L includes the episode transcription. The findings of each level of analysis are described in the subsequent sections.

Episode 5 Description Phase: Digging into the Text

Aspects of the IC that influenced its selection for analysis included the teacher’s efforts to listen to learners and build community. In this episode, the teacher used multiple interactional techniques that demonstrated her attentiveness to individual learners. One of the primary ways was through her use of proximity. Leticia closed the physical distance between herself and learners as they shared with her what they were thinking and writing in relation to the Linking Language images. Turns 5, 28, 41, 50, and 63 reflected her crouching, stooping, or bending in order to be physically closer to students and to better see what they were recording.

How she responded to students depended on what they produced. Leticia frequently revoiced students’ contributions (see turns 7, 9, 11, 43, 45, 61, 68, 74). Having students capture their ideas on the Linking Language posters was a key goal, as evidenced by Leticia’s common
use of “Can you” questions (turns 11, 36, 51, 53, 61, 63, 74) to prompt students to document their ideas and connections on their learning tool. For example, in turn 10, Luis’s group was working with the heartbeat poster. He confided in Leticia, “Um, doctors freak me out and making (sic) me feel (x) and I got a band-aid over that.” She responded, “So if that scares you, what can you draw on your Linking Language poster?” Another example can be found in her response to Harmony in turn 36 (i.e., “Can you draw that for me or write it?”)

Leticia created a risk-free environment by allowing students to engage with the content in their own ways and at their own pace. For instance, turns 36-40 illustrated Leticia chuckling in a sweet tone after revoicing a students’ answer that they were drawing an undetermined “something.” At another moment in turn 50, Gabriel raised his hand to have the teacher come to his group. He shared his concern regarding what a teammate wanted to draw on the poster (“Luis is gonna draw (xx) from the scary movie.”) Although the teacher responded with an empathetic tone, demonstrating that she understood Gabriel’s concern, she also defended the student’s right to draw what he wished (“Oh, so he’s drawing what he sees on there. You can do the same thing. What connections did you make? What did you see?”).

Supporting learners to develop as members of a learning community also meant that at times Leticia intervened in students’ interactions with peers to ensure that each had an equal opportunity to contribute to the learning process. In turn 64, Mia began to share what she wanted to link on the poster when she was interrupted by a teammate. Leticia reminded the student that it was Mia’s turn and reinstated Mia as the speaker. After Mia communicated in turn 67 that she wanted to link the girls and boys, a teammate jumped in with, “Wait! I was gonna link the girls.” Leticia politely settled the matter responding, “Well, she’s got the girls and boys ((indicates Mia)). What would you ((indicates this student)) like to link?”
Leticia consistently demonstrated respect for students as individuals and as learners. She did this through the words she used as she referred to students (e.g., “Friends” in turn 27, “sir” in turn 49). She honored students’ thinking and, rather than using a word like “check” or “evaluate” in line 55, she instead said that she would “confer” with learners on what they would like to link.

**Episode 5 Interpretation Phase: Exploring the Situation**

The field of Episode 5 is characterized by an IC in an ELA lesson centered on the theme of arts, with music as its focus. The purpose of the IC was to support students to connect to the topic, as expressed through the two images on the Linking Language (Herrera et al., 2017) posters (i.e., heartbeat, which in the subsequent lesson would be connected to the vocabulary word “rhythm,” and a man riding a unicycle, which would be connected to the word “entertain”). These posters played a pivotal role as tools for mediating students’ meaning-making processes (Kozulin, 2003; Vygotsky, 1978). In her interview, Leticia commented on her purposeful decision-making related to the particular images used for the Linking Language posters. She reflected, “knowing that they [students] are going to gravitate towards objects or, you know, what they see,” she then asks herself, “what do I want them to see in those objects, or those people, and what they're doing or what they're using.”

As they activated their background knowledge, students were encouraged to engage with the images on multiple levels (e.g., what they saw, what it reminded them of, what it made them think about, or how it made them feel). Leticia provided what Herrera (2016) refers to as a “canvas of opportunity” (p. 83). Students were allowed to enter into the learning from whatever angle they chose. Leticia’s interactions and language reinforced the risk-free, judgement-free nature of the activity within the activation phase of the lesson (Herrera, 2016).
Later in the episode, learners were asked to observe all the connections on their original poster and look for patterns they saw in the connections. This process (Herrera et al., 2017) allowed students to categorize, classify, and notice the diversity of thought represented, as the connections had been made by their small group members as well as other peers. The teacher then conferred with learners on their ideas about what they wanted to link before they captured the commonalities on sticky notes.

The tenor of the IC situation included the subject positions of teacher and student. In this episode, there was evidence that learners were continually being guided by the teacher to see themselves and their fellow peers as members of a shared learning community (Herrera, 2016). Small actions contributed to the sense of community in the classroom. For instance, when one boy joined a group that had already gathered on the carpet, he was warmly welcomed by the other group members. In this classroom, all students had a right to express themselves and have their ideas respected. Specific instances in which the teacher intervened to ensure that all students were able to engage as equal contributors to the learning process were discussed in the previous phase of analysis.

The teacher’s role in the situation involved being a listener who was intent on understanding what students were trying to communicate. Leticia asked students questions to clarify her understanding and to provide opportunities for students to articulate rationales for their connections (Herrera, 2022). Leticia explained the importance of always questioning why.

. . . not only does that get them started with being able to justify their thinking, but that tells me, you know, what's going through their head. You know, what are they processing? What are they making instant connections with? What do they know a lot
about? And it also tells me what they don't know, and what they might be missing that I want them to get from the picture.

Student responses thus provided her with insights into their background knowledge and experiences, some of which involved strong emotional responses (e.g., feeling “freaked out” by reminders of a doctor’s office). Leticia spoke about her common practice of having students make affective connections to words.

I honestly feel like every word, if you have a connection to it there's usually a feeling behind it. And so, like an example would be the little girl . . . Maricela (pseudonym).

When she talked about the heartbeat being something that she sees in the doctor [office], you know, what you don't know about that backstory is that her mom suffers from a severe illness. And so they do spend a lot of time in the doctor's office. . . . And so, it's very critical for me to know. You know, what is your feeling behind it, because usually the feeling behind it, is that connection.

Leticia believed that tapping into students’ emotional responses, as encouraged in BDI (Herrera, 2016), was key to unlocking their memories about a word. Her revoicing of student connections, use of inclusive pronouns (e.g., our, we, us), and efforts to reduce physical distance between herself and learners all contributed to a classroom ecology designed to nurture students as individuals and as learners.

With regard to the mode reflected in the episode, language played a constitutive role. All learners had opportunities to talk with small group members as they recorded connections to the Linking Language images. Leticia’s use of gestures (e.g., pointing to her head, placing her hand over her heart) supported students’ comprehension and engagement. Students were allowed to document connections to their own knowledge systems (i.e., funds of knowledge, prior
knowledge, and academic knowledge) (Herrera, 2016) before being asked to explore connections across peers’ perspectives. They each had an opportunity to label a sticky note with something they wanted to link. As a result of the processes in this episode, the students in this classroom community had personalized scaffolds (Herrera et al., 2017) to support their future work with the topic.

**Episode 5 Explanation Phase: Connecting to Social Practice**

Despite the growing number of CLD students in the United States, the percentage of teachers of Color remains disproportionately low. For example, although students of color represented 50% of the student population in 2014, teachers of Color comprised only 20% of the teaching workforce in the 2015-2016 academic year (Carver-Thomas, 2018). The gap in representation between students and teachers is largest for Latinx individuals than for any other racial/ethnic group, despite the fact that the share of Latinx teachers and students is growing faster than any other racial/ethnic group. Simply sharing the same race/ethnicity as learners, however, does not guarantee that teachers are prepared to foster culturally responsive/sustaining learning conditions.

In this classroom, Leticia demonstrated both the instructional capacities and the critical consciousness (Freire, 1970/2018) to support effective practice with CLD students, including the predominantly Latinx English learners in her classroom community. As she noted in her interview, her positionality as a bilingual Latina teacher influenced both where she decided to teach and how she taught. She considered, for example:

> Who would benefit from my experience, from my understanding, from my background?
> And it's always been, and, you know, kids from a diverse culture. . . . I feel like a lot of the times in our, in our environment, teachers, not purposefully and not in a bad way, but
they do kind of make assumptions. And I feel like growing up the way I grew up, the experiences I've had, I don't have assumptions [about students’ background knowledge]. And so I truly want to know, you know, what do these kids know? What do they have to bring to the table?

Letica’s desire to know what each learner brings to the table was apparent in this episode as she used the Linking Language strategy to activate students’ background knowledge. By providing such opportunities and then using student connections to inform the lesson, teachers validate who students are and what they know.

Key to fostering more equitable learning opportunities for CLD students is ensuring that all learners have equal opportunities to participate (Dewey, 1923; Herrera, 2016; Prasad & Kalinec-Craig, 2021). Leticia deliberately interacted with learners in this episode to create a community that upholds the rights of each member. This was evident, for instance, in the way she used her authority to safeguard Mia’s conversational turn so that Mia could express her thoughts about which ideas she wanted to link. Leticia also interceded on Mia’s behalf to ensure that she was able to make the proposed links on the group poster.

**Episode 6: Learning as a Shared Venture**

The second IC episode selected from Leticia’s classroom took place during an ELA lesson focused on the topic of animals. Most of the students were seated on the carpet at the front of the room with their clipboards, with a few learners seated at individual desks. The class already had discussed the component sounds in the word “animals” and had written the topic on their DOTS charts. The teacher had modeled this writing on the class DOTS chart, which was drawn on a large piece of chart paper and posted on the board at the front of the room. During their think time, students had used pencils to record their background knowledge connections to
the topic on their DOTS charts. The teacher had circulated among students to prompt learners as needed. Episode 6 began as the teacher brought the class back together. Appendix M includes the transcription for this episode. The subsequent sections provide the findings from the multilayered analysis.

**Episode 6 Description Phase: Digging into the Text**

I selected this portion of IC for analysis because of the way the teacher encouraged learners to work together in pairs and as a class to learn from each other and to contribute to the collective learning process. Early in this episode, the teacher’s words communicated her assumption that all students have background knowledge about the topic. In turn 1, she explained that students were to share what they “already know” about animals. When it became apparent that Josiah had not recorded a connection, Leticia urged him to “add something really quick” before his partner arrived to share ideas with him. When he shared an idea aloud, she further prompted him to record his thought on his learning tool. Leticia reiterated in turns 47 and 67 that the class brought a lot of background knowledge to the topic, setting the stage for the learning that was going to take place.

As students shared with peers, Leticia explicitly encouraged the borrowing of ideas. For example, in turn 11, she told Javier, “You could add, if you want to add his idea, you can add it to yours. ((addressing Josiah)) If you want to add “bats” to yours, you can borrow his, too.” Likewise, Leticia’s use of “even” in the following lines from turn 17 illustrated the priority that she placed on this practice: “I love how I saw friends sharing their ideas from their DOTS charts . . . and I even saw friends borrowing ideas that they heard ((smiles)) from a friend that they shared with.”
Revoicing was a frequent conversational technique that the teacher used throughout the episode. Revoicing occurred in 18 of the teacher’s 32 total turns (56%). In five of these instances, the teacher also elicited rationales for the students’ ideas by asking “How did you know about…” (turn 5) or “Why did you add…” (turns 9, 21, 29, 41). During the time when students were working in pairs, Leticia frequently used proximity to better connect with learners and attend to what they were producing. She bent down toward a student or crouched down beside students in turns 1, 3, 5, and 11.

Leticia built a shared sense of belonging in the classroom community by addressing the learners as “friends” (turns 1, 17, 67) and using inclusive pronouns (i.e., our, let’s, we). She demonstrated her knowledge of students as individuals through her response to Omar’s background knowledge connection in turn 17: “((smiles)) Oh, how did I know you were going to add penguins? ((laughs lightly…))” She fostered relationship building (versus competition) in turns 17-19 by allowing students to repeat ideas for inclusion on the class DOTS chart (“That just means we all share those same ideas, and it’s awesome.”). When students later were providing their individual contributions for her to record on the class chart, Leticia referenced the conversation she had previously engaged in with Omar (“Ooh, and you shared that [penguins] with me earlier while you were writing it”, turn 39), reinforcing the fact that she attended to what students shared with her during the learning process.

Episode 6 Interpretation Phase: Exploring the Situation

The field of Episode 6 reflected IC that took place during pair sharing and whole-group discussion in the course of an ELA lesson that centered on the topic of animals. The purpose of the IC in this episode was to further activate students’ background knowledge about the topic (Herrera, 2016) as they shared ideas with peers and collaborated with the teacher to document
the distributed knowledge of the classroom community. The individual DOTS chart (Herrera et al., 2017) served as a tool on which students could collect ideas throughout the lesson. The class DOTS chart was used to record a selected example from each student, making it a tool which represented the collective wealth of ideas on which subsequent learning of the class would be built.

The tenor of the situation involved the subject positions of teacher and student. Leticia minimized physical distance through her proximity to learners, as evidenced during the partner sharing. She used inclusive pronouns and demonstrated her interest in what students shared by frequently revoicing and asking students to articulate the rationale behind their connections to background knowledge. Both of these practices are encouraged for the orchestration of BDI ICs (Herrera, 2016). Leticia also referenced knowledge of students (i.e., their biographies) built through interactions that occurred prior to and during this episode. Through her reiteration that students possessed a lot of background knowledge about animals, Leticia positioned each learner as a knowledgeable contributor to the learning process. In this way, Leticia used IC in the classroom to build each students’ academic self-concept (Herrera, 2022; Sousa, 2017).

Leticia also encouraged students to see their peers as important resources in their learning. She did this first through the opportunities that she provided for students to share ideas. She easily could have asked students to document their individual connections on their DOTS charts and then moved straight to sharing out ideas for the class DOTS chart. Instead, she incorporated partner work in between, which afforded students the chance to discuss multiple ideas related to the topic. In her interview, Leticia added that sometimes she additionally has two pairs join together to form a group of four for sharing, before then moving to whole-group
sharing. Utilizing these types of i+TpsI grouping structures (Herrera, 2016) allows learners to have more frequent opportunities for talk.

Leticia’s encouragement for students to borrow ideas from one another, which is emphasized in BDI (Herrera et al., 2017), further minimized the risk of learners seeing each other as competitors rather than collaborators. Speaking to the practice of allowing students to borrow ideas, Leticia noted that sometimes a learner might not know much about a topic or might not feel comfortable sharing his or her ideas. In these types of scenarios, borrowing an idea from a peer “kind of gives them the confidence to share ‘cause they know somebody else, you know, has that same idea or that connection.” Such actions and use of language during the learning situation (reflected in the IC) supported the development of a shared sense of community within the classroom.

The mode of this situation, in which language played a primary role, reflected that each learner had an opportunity to talk with one or more peers. The teacher also ensured that each student contributed one self-selected idea to benefit the collective learning of the class. Leticia noted, “I like to hear from all of ‘em [learners]. So it’s, it’s a piece of accountability. . . . they know ‘I can’t just say I don’t know or I can’t just pass, I have to share something.”’ At the same time, she created a low-risk situation (Herrera, 2016) by allowing repeated answers, as opposed to requiring each learner to provide a unique contribution. In fact, she characterized having the same idea as a peer as something that was positive (i.e., “awesome”).

Leticia’s attention to the affective filter (Cummins, 1984) was also apparent in her response to Adam (turn 43), whose contribution for the class was the word “dots.” Leticia interpreted this word as being reflective of the BDI DOTS strategy being used. Although not directly connected to the topic of animals, her verbal response and tone, as well as her addition
of the word to the class chart, affirmed the contribution. Throughout the episode, the students and the teacher used both spoken and written language.

**Episode 6 Explanation Phase: Connecting to Social Practice**

Typical U.S. classrooms reflect norms of individualism rather than collectivism, which emphasizes interdependence and group success (Trumbull et al., 2020). Differences between these value systems can curtail the success of CLD student who frequently come from collectivist cultures. In this episode, Leticia first provided an opportunity for students to document their personal connections to the topic. Students then shared their ideas with a partner. As students collaborated with peers, Leticia emphasized the biography-driven practice of borrowing ideas (Herrera et al., 2017). Such interdependence represented a shift toward more collectivist classroom dynamics and fostered the learning of individual members as well as the larger classroom community.

In this episode, students activated background knowledge by making connections to the broad topic of “animals.” As Leticia reflected on factors that influenced her current instructional practices, she shared that the district emphasis on standards-based proficiency scales informed her decision to narrow topics to more directly correspond with the expectations of the standard.

So instead of like, for this one, instead of doing “Animals” . . . the topic might have been, “How are mammals similar to amphibians?” as an example. And so, so now it's a little bit more focused. Where before it was a little more general, which is what I wanted now it's a lot more specific. So what they're [students are] putting on their DOTS chart I feel is a lot more… (pauses searching for the right word) it's a lot less, especially when they're building background on there.
The added level of specificity now incorporated in activation activities has had the unintended effect of reducing the number of connections learners make. Given that the intent of activation is to gather words and ideas from students’ background knowledge that can contribute to the teacher’s orchestration of learning, the narrowing of the curriculum has likely diminished, to some extent, the responsiveness of instruction to students’ biographies.

**Episode 7: Allowing Students to Discover for Themselves**

The third episode of IC that took place in Leticia’s classroom was again from the ELA lesson focused on the topic of animals. The students were still seated in the same places on the carpet at the front of the room; a few learners were seated at desks. The class had proceeded to write the vocabulary word “utilize” along the right-hand margin of their individual DOTS charts. The teacher modeled how to write the word on the class DOTS chart. Students then individually had the opportunity to brainstorm background knowledge connections to "utilize," after which they shared ideas with a partner. A few students shared out possible ideas with the class; many students were unsure about the word. With the support of the teacher’s modeling, the class then added the second vocabulary word “assist” to their DOTS charts. Episode 7 began as the class moved to consider this second vocabulary word. The transcription for the episode is provided in Appendix N. The findings from each level of analysis are discussed in the sections that follow.

**Episode 7 Description Phase: Digging into the Text**

This IC episode was selected for further analysis due to the way the teacher refrained from either confirming or disconfirming students’ initial connections and instead allowed learning to unfold as a natural process of discovery. Leticia provided students with a low-risk opportunity to document and share with a partner their initial connections to the word “assist.” Rather than asking students to share what they know about the word, she encouraged them in
turn 1 to discuss “what do you think you already know about ‘assist’?” This choice in wording reduced the pressure for students to be correct. The same type of phrasing was used later in the episode as well (turn 19). Leticia further reminded students that it was acceptable to not know. She also provided them a way to respond if this were the case (i.e., “Then just say ~I don’t know.~”).

Leticia continued to reinforce the low-risk nature of the task through the encouraging response she gave to a pair of students who both expressed not knowing how to connect with the word. Specifically, in turn 11 she responded, “Oh, we’re going to have a lot of learning this week.” Her use of the inclusive pronoun “we” in this sentence was pivotal to communicating the joint venture of learning to be undertaken by the classroom community (as opposed to using “you,” which would have positioned these two students as being in greater need of learning than some peers).

A positive classroom ecology was further promoted by Leticia’s use of terms of endearment in her one-on-one interactions with students. For instance, she commended one student for using a previously learned word by saying, “Ooh, you’re remembering our word from right before spring break. Nice job, sweetie pie” (turn 9). In another moment Josiah needed his pencil sharpened and Leticia offered, “Here, I will sharpen it for you, bud.”

Throughout the episode, the teacher frequently revoiced students’ contributions. In fact, revoicing took place in 7 of Leticia’s 18 total conversational turns (39%). A distinguishing characteristic of revoicing in this episode, however, was the noncommittal nature of her responses with regard to the truth value of the contributions. Leticia at times revoiced in the form of a question. For example, in turn 7 Leticia responded, “You think that [assist] means when the animals are gone?” In seven separate turns (i.e., turns 13, 15, 22, 26, 30, 32, 34), Leticia used
verbal replies and words such as “Mmm,” “Ohhh. Interesting,” “Interesting,” “Hmm,” “Okay,” and “Oh, Okay.” The importance of all background knowledge connections, regardless of whether they were correct or incorrect, was emphasized by the teacher’s revoicing and addition of multiple ideas to the class DOTS chart in turn 34. When the class got ready to add new information reflective of current curricular learning, Leticia still displayed the DOTS chart with the background knowledge connections for the class to reference.

**Episode 7 Interpretation Phase: Exploring the Situation**

The field of Episode 7 was characterized by IC that took place throughout whole-group and partner interactions during an ELA lesson focused on the topic of animals. The purpose of the IC exchanges in this episode were to activate learners’ background knowledge connections (Herrera, 2016) to the vocabulary word “assist.” After having time to individually record ideas, students shared their initial thoughts with a partner. Then they made their ideas public for the rest of the class. In the context of these tasks, which reflected multiple “i+TpsI” grouping configurations (Herrera, 2016), the DOTS chart (Herrera et al., 2017) served both as an individual tool for mediating students’ learning (Kozulin, 2003; Vygotsky, 1978) and as a scaffold for class discussion and engagement with the vocabulary word.

Leticia described the versatility of this particular BDI strategy, noting that she still uses it on a weekly basis and in other subjects (e.g., math, social studies) as well. She explained how students utilize the DOTS chart to support their interaction with the topic and their engagement in learning throughout the lesson:

It's not just an organizer. It's not just, you know, something you're spending all this time on. The kids get to the point where they *know*, “Okay, so whatever I added with my pencil, that's what I brought to the table. That's *my* background knowledge. Now I’m
adding with this pen, and this pen is going to be about the vocab words—what I learned about the vocab words. . . . And they learn to use that tool, and they learn to differentiate on there.

During this episode, Leticia intentionally refrained from confirming or disconfirming students’ ideas. The exchanges that took place in this phase remained focused only on activation (Herrera, 2016). Although teachers commonly give hints about whether answers are on track or they may outright say whether ideas are correct or incorrect, Leticia incorporated neutral responses in her speech. She used the resulting suspense to generate increased interest on the part of students to find out the actual meaning of the vocabulary term, especially as it related to the topic of animals.

Similar to previous episodes, the tenor of the situation involved the subject positions of teacher and student. Leticia reduced both the social distance and the physical distance between her and the students by using inclusive pronouns (e.g., our, we, us) and including terms of endearment (i.e., sweetie pie, bud) in her responses. She attended to proximity as she circulated among pairs during their partner time. For instance, she crouched down beside partners to better hear, observe, and ask questions about what they were sharing. She stooped down toward a student to better attend to her needs. She also helped with the noncurricular task of sharpening Josiah’s writing utensil. Each of these situational decisions (Herrera, 2016) enabled Leticia to foster rapport among members of the classroom community.

The mode of the situation reflected in Episode 7 pointed to the constitutive role of language. The teacher and students used spoken and written language to further learning. Students wrote ideas on their DOTS charts, and Leticia documented on the class DOTS chart the words that students contributed. Learners employed spoken language to share their ideas, first
with peers and then with the class. Leticia likewise used spoken language to provide directions, revoice students’ connections to background knowledge (Herrera, 2016), and respond to the needs of individual learners. The gestures that Leticia incorporated during her conversational turns and while students were sharing (e.g., nodding, pointing to elicit contribution) further encouraged the ongoing investment of students in the learning process.

All learners had opportunities to be involved in the classroom discussion, and the DOTS chart and peer interactions provided supportive scaffolding for such engagement. Students’ willingness to share ideas was nurtured by the ways Leticia created a low-risk learning environment (Herrera, 2016). Her emphasis on what students thought they knew (as opposed to what they did know) invited those who were less certain to go ahead and share their ideas. Even students who believed they had no connection to the vocabulary word were still encouraged to express aloud that they did not know the word. In this classroom, not knowing was considered a fully acceptable response that opened the door to future learning.

**Episode 7 Explanation Phase: Connecting to Social Practice**

U.S. classrooms historically have provided limited opportunities for student talk. Research on the balance of teacher talk to student talk in the classroom has revealed that teacher talk prevails during 70-89% of class time (Gewertz, 2019). Such conversational dynamics illustrate and reinforce entrenched patterns of teachers positioned as purveyors/producers of knowledge. The proportion of student talk time evident in typical classrooms belies the frequently espoused belief among educators that students are active constructors of knowledge. Although important for all learners, opportunities to talk are especially significant for emergent bilinguals who need time to practice their developing language skills in interaction with others.
During this episode, Leticia’s incorporation of partner sharing and whole-group sharing (i.e., i+TspI, Herrera, 2022) increased the opportunities for students to use their English skills. Her emphasis on learners’ actively constructing their own understanding of the content (e.g., by not immediately confirming/disconfirming activated ideas) also fostered increased engagement with the topic and vocabulary. In discussing her instructional practices, Leticia identified administrative leadership as critical to her allocating sufficient time to BDI strategies such as DOTS (Herrera et al., 2017). The principal that brought BDI professional development to the school provided invaluable support by validating Leticia’s BDI implementation and encouraging her to continually audit the degree to which students (rather than the teacher) were provided opportunities to put “miles on the tongue” through classroom talk.

Leticia perceived that she continues to be afforded the flexibility and authority to determine the most effective learning path for students in her classroom.

I feel like I do have freedom to choose. Like, you know, I do have to focus in on that standard, which is something I’m pretty comfortable with now, but knowing that I can still use all these tools that I’m used to to get there.

She explained that the onus is on her to invest planning time and instructional time to engaging students in biography-driven ways, and to be able to justify her decisions, as needed. This involves strategically creating an instructional schedule that allows her to make the shared construction of meaning a priority. Crafting and sticking to a schedule can be a challenge, she admitted, but necessary to ensure, for example, that students with special needs are afforded the types and durations of support (e.g., small group time, comprehension time) that she has communicated on individualized learning plans. Despite the time commitment, Leticia shared that she has seen the impact of BDI on students’ learning. She reflected: “BDI is knowing who's
in your classroom and what they bring to the learning. 

I don't know that I ever will stop having BDI.”

**Exploring ICs from Michelle’s Classroom**

Two video-recorded lessons from Michelle’s 2nd-grade classroom were available for analysis. After reviewing both lessons (combined duration of approximately 3 hours and 8 minutes), I selected one lesson from which I identified four focal episodes of IC. In the sections to follow, I will discuss each episode utilizing Fairclough’s three-part progression.

**Episode 8: Linking to Life Outside the Classroom**

The first episode took place during an ELA lesson that centered on the topic of baseball. Students began the lesson by working on spelling patterns and blending with phonics words. The teacher later guided students to add eight vocabulary words to their individual Tic-Tac-Toe boards. Michelle explained that this Tic-Tac-Toe board would serve as one of their learning tools for the week. With their small groups, students worked together to make and discuss connections to each of the words. The teacher circulated among the groups to observe learning, engage in conversation, and provide additional support. Episode 8 began as the teacher approached one small group comprised of four students (Sarah, Matt, Jesyka, and Jamal). Appendix O provides the episode transcription. The subsequent sections discuss findings related to each level of analysis.

**Episode 8 Description Phase: Digging into the Text**

I selected this IC episode largely due to the teacher’s efforts to build relationships with students through her willingness to discuss life outside the classroom and her use of humor. In this episode, Michelle’s actions reflected a priority on building relationships within the classroom community. As she spoke with this small group of learners, she referenced a conversation that
she had held with another group (“I was telling them . . .” in turn 13) about the word “curb.” She relayed her connection to sitting on a curb at a local parade she had attended the past weekend. She also later referenced an idea about “curb” contributed by a student from another group (see turn 25); however, the first reference outside the immediate conversation was noteworthy because it was the launch point for a mini-dialogue about the parade. Sarah, in particular, demonstrated interest in discussing the event. She began with basic questions in turn 15 (“What parade was it?”) and turn 18 (“When was it?”) to first establish that this was the same parade she, too, had attended. The excitement of receiving “lots of candy” was still fresh in her mind (see turn 22).

Michelle also used humor to bring levity to the learning. In turn 25, she differentiated the pronunciation of “curb” from that of “curve.” She then pulled both words together as she provided the “tricky” example that “a curb could be ‘cur’”. She supported students to guess the second word by gesturing the shape of a curved line with the movement of her arm. Her amusement and enjoyment of this witty example in turn 27 was evidenced first by her chuckle and then as she said, “Whoa,” accompanied by her making a silly face and gesturing an explosion near her head. “Mind blown,” she added as she moved to walk toward another group of learners.

Throughout this episode, Michelle drew students into the conversation through her use of revoicing (especially in turns 9 and 11). She periodically paused her speech to elicit student attempts to fill in the missing part of the word (see turns 4 and 11, in addition to the previously described example in turn 25). Her use of gestures further supported students’ engagement and comprehension of the word “curb” (turns 9 and 13), as well as their understanding of the related word “side” (turn 11) and the contrasted word “curve” (turn 25).
Episode 8 Interpretation Phase: Exploring the Situation

The field of Episode 8 reflected IC that occurred in the context of the teacher’s interactions with a small group of learners during an ELA lesson on the topic of baseball. The purpose of this IC was to support the students’ understanding of “curb,” a word the group had not yet discussed. Students were using the Tic-Tac-Toe board, which is part of the BDI Pic-Tac-Tell strategy (Herrera et al., 2017) to document their ideas connected to each of the target words. In this way, the Tic-Tac-Toe board served as a tool for mediating their learning (Kozulin, 2003; Vygotsky, 1978).

The tenor of the situation involved the subject positions of student and teacher. The students already had been functioning as a collaborative group when the teacher arrived. Michelle first observed what Jamal had written on his paper to determine whether the group had talked about “curb.” This action thus informed her situational decision making (Herrera, 2016). Not all students knew what the word meant, as demonstrated by the initial connection provided by Sarah, which Michelle disconfirmed. However, because Michelle had opened the conversation by asking what knowledge students had of the word, Matt and Jesyka were able to share ideas that were in line with the word’s meaning. Michelle fulfilled the role of facilitator (Herrera, 2016) as she revoiced ideas and added ideas of her own.

Michelle’s example of sitting on a curb at the St. Patrick’s Day parade allowed her to connect especially with Sarah, although Matt related that he, too, had attended the parade. Rather than strictly staying within the academic realm, Michelle conversed for a brief time about the parade in a purely social way. As she commented in her interview,
I talk to them [students] like I do anybody. I don't have like a teacher me and then, not me. So yeah, when she was like, “What?” I was like, “Oh, I went to St. Patrick's Day parade” and, you know. I just like to have just regular conversations with them. In doing so, she allowed learners to see her as a person with a life outside the classroom. Michelle perceived having genuine conversations with students that do not feel forced as characteristic of her instruction.

Michelle further allowed students to see her as a person (beyond the typical teacher role) through the way she brought humor and silliness into the classroom. Even her use of body positioning to indicate/gesture sitting on a curb was a departure from the teacher stance of standing (reflecting authority) that is typically evident in classrooms. She additionally reduced the physical distance between herself and the students by kneeling on the floor beside the group. Her periodic use of inclusive pronouns (e.g., we, we’re) allowed her to minimize the social distance as well.

The mode of this situation reflected the constitutive role of language. The channel was characterized as primarily spoken language. However, students continued to add to their individual learning tools during this episode, and the teacher likewise referenced the tool in her speech and observed what was written before engaging in conversation with the group. In addition to the teacher’s previously described use of gestures to support communication, this episode also included numerous instances of students likewise using gestures (a practice encouraged by BDI [Herrera, 2016]). Students’ gestures allowed them to more fully express themselves as they contributed connections to their background knowledge. Matt, for example, gestured to indicate a driveway (see turn 8), and Jesyka demonstrated hitting a curb (turn 10).
Episode 8 Explanation Phase: Connecting to Social Practice

In many classrooms, the “official space” (e.g., the teacher’s Discourse, the curriculum) and the “unofficial space” (e.g., students’ background knowledge, thoughts about the curriculum) remain distinctly separated (Gutierrez et al., 2003). What results is development of underlife in which student behaviors counter what the teacher expects of them in a given situation (Gutierrez et al., 1995). In this episode, Michelle created a context that was conducive to development of third space, which is characterized by the teacher and students collaboratively maximizing what each brings to the learning process in order to jointly construct knowledge (Di-Giacomo & Gutiérrez, 2017; Gutiérrez & Rogoff, 2003).

A first step toward fostering third space is encouraging students to bring their life experiences into the classroom. Teacher actions that reveal their own authenticity (e.g., sharing a personal connection to the topic) can invite learners to engage in dialogue about the curriculum that incorporates their own meaning-making processes and experiences (Plust, Murphy, & Joseph, 2021). In this episode, Michelle brought her personal life experience into the IC by discussing the vocabulary word “curb” in the context of her time at a local parade. She likewise allowed students such as Sarah to comment about their parade experience. Had she not provided this opportunity to learners in the group, it is likely that discussion about the parade would have become part of the classroom underlife instead.

Episode 9: Teachers as Learners Who Make Mistakes

Episode 9 again took place during the ELA lesson focused on the topic of baseball. The class was gathered together on the carpet at the front of the room. The episode began as the teacher started to introduce the topic. The transcription of this episode can be found in Appendix P. The subsequent sections discuss findings related to each level of analysis.
Episode 9 Description Phase: Digging into the Text

This short episode of IC was selected for further analysis primarily because of the way the teacher positioned herself as a learner in relation to the topic and as a person who sometimes makes mistakes. In this episode, the teacher created the conditions for students to activate their background knowledge without fear of failure. She did this in numerous ways. First, she admitted that she came to the topic with little background knowledge herself (turn 1): “When I first started planning this, I'm gonna be honest, I did not have a lot of knowledge about [and students filled in the word “baseball.”]” Michelle reassured learners that they were capable of excelling on this task, noting that “this is what you guys do best” (turn 3). She used the word “just” (meaning “simply”) in “it’s just what you know about baseball” to reduce possible pressure to perform (e.g., academically, linguistically) that students might have been feeling. Michelle also used multiple ways of communicating the message that all ideas counted: “what you know” (turn 1), “what comes to mind” (turn 3), “there are so many things that could come to mind” (turn 5), and “whatever comes to mind” (turn 7). In addition, she explicitly asked learners if there were any right or wrong answers when making connections (turns 7-10) and emphatically revoiced “No!” in turn 11.

Students were invited to use multiple means to record their connections (i.e., “pictures, words, sketches”). To get students started in their brainstorming, Michelle provided a sample of four possible entry points to the topic (turns 3 and 5): “It might be your dad watching baseball on Sunday afternoon. It may be you playing catch. It may be your favorite team. Maybe food, I mean there are so many things . . .”

Michelle further emphasized the relevance of all background knowledge connections when she referenced an incident that took place in the classroom at the beginning of the year. As
she related in turns 11-13), one of the students, Matt, had made a connection that she had perceived as “weird.” In an incredulous tone, she noted that she “almost got like mad” and then mocked her own response saying, “I was like ~Matt, that’s not on topic~”. She stated for the class that when she had asked Matt to explain his idea, she had realized it was a good connection. Michelle then linked what she had learned from this incident to the task at hand (i.e., making background knowledge connections to baseball) by saying (turns 15-17), “So sometimes if it seems a little off, that's just what that person's [...] Thinking ((puts hand on chest)) or how they're attached to it.” The importance of students’ background knowledge connections to the upcoming learning was made clear when Michelle communicated that before beginning with the curricular content, she needed to know what the leaners knew about the topic (turn 1).

**Episode 9 Interpretation Phase: Exploring the Situation**

The field of Episode 9 reflected an IC that took place with the whole class during an ELA lesson related to the topic of baseball. The purpose of the interactions was to set the stage for students to document connections to their funds of knowledge, prior knowledge, and academic knowledge (i.e., knowledge systems) (Herrera, 2016). The teacher explained that students were going to use small team “connection posters” on which they would splash their ideas using illustrations and/or words. Although one of the posters was shown to the class, the students did not interact with the posters during this episode. Through the multiple ways described in the previous phase of analysis, the teacher used this IC to create the conditions for students to have a risk-free opportunity to engage with the topic (Herrera, 2016).

The tenor of the situation involved the subject positions of teacher and student. Although the expected roles of teacher as facilitator (Herrera, 2016) and students as learners were evident (e.g., Michelle explained what the class would be doing and the students listened attentively),
this episode also involved Michelle intentionally positioning herself as a learner. She admitted to the students that she did not bring a lot of background knowledge to the topic. By sharing this, she demonstrated that it was okay not to know.

Michelle further cemented her positioning as a learner by directly discussing a situation when she got things wrong. She candidly explained what she had initially thought about a connection Matt had made during a lesson earlier in the school year, as well as her realization that resulted after she took the time to have Matt explain his thinking (eliciting such rationales is a practice emphasized in BDI [Herrera, 2016]). It is noteworthy that Michelle was not highlighting a moment that reflected a limitation in content knowledge, which might be easier for some teachers to do. Rather, she was spotlighting a moment that reflected an error in her craft of teaching—an error in judgement that diminished a student’s contribution and likely, to some degree, damaged her relationship with the learner. By reminding students of what could be learned from this incident and restating the value of Matt’s connection, Michelle actively engaged in rebuilding the relationship and simultaneously helped to lower students’ affective filters (Krashen, 1982) with regard to their own generation and documentation of ideas. As Michelle emphasized during the IC, background knowledge connections only need to make sense for the individual learners, because the connections reflect their personal schemas. New learning during the connection phase of the lesson then will make clear the degree to which the connection was truly relevant or accurate (Herrera, 2016).

When she discussed her teaching during the interview, Michelle explained that mistakes are just part of being human.

I think it helps them [students] to see that you're a real person. . . . Like I make mistakes, all the time. Like they know my flaws, they know my strengths, you know, that I am a
real person and, hopefully, they can see that “I can do that when I get older, too,” you know. Like “I’m a real person too, just like Ms. Scott.”

Michelle was comfortable being “real” with the learners in her classroom. By allowing students to see her strengths, limitations, and mistakes, she believed that she fostered their ability to keep striving even when things do not go perfectly.

The mode of the situation reflected language playing a primary role. Spoken language was used by the teacher and students. The teacher was largely the communicator and students were primarily receivers. However, Michelle also provided opportunities for learners to engage as she asked closed questions and paused to have them join in with particular words. She additionally supported students’ engagement and comprehension of the oral language through her use of gestures (Herrera, 2016), such as holding up a bag of pencils, making a circular gesture to indicate “connections.”

**Episode 9 Explanation Phase: Connecting to Social Practice**

Narrow constructions of knowledge and beliefs about whose knowledge counts permeate many classrooms (Gay, 2018; Hatton & Lupo, 2020). CLD students’ ways of knowing are frequently discounted and, as result, learners may limit their sharing to include only those aspects of their knowledge or experiences that they perceive align with the teacher’s views; alternatively, they may, in effect, be silenced altogether (Iannacci, 2018). This epistemic hegemony stands in contrast to the desired epistemic friction (Medina, 2013) that results when individuals have opportunities to explore how their perspectives compare with those of others. As Medina (2013) notes, when “one acknowledges and genuinely engages with other ways of perceiving, feeling, and thinking,” the epistemic friction allows us to “feel the contours of our social gaze” (p. 204).
Such communication requires humility, curiosity/diligence, and open-mindedness on the part of both the speaker and the listener (Medina, 2013).

In this episode, Michelle’s IC emphasized the importance of every member of the classroom community being able to make and share connections from their uniquely situated perspective without fear of being judged. She considered perspective taking to be essential to her classroom instruction, a quality that has been enhanced by her more recent efforts to learn Spanish and engage in cross-cultural interactions with Latinx members of the community. She reflected that all teachers should

[G]et to know your kids. Not just as students, but like people . . . and understand their experiences. . . put yourself, I mean if you can, just in some of those situations. And I know you can't always directly put yourself in situations on purpose, but . . . I just think it's really, really important to understand, you know, where people are coming from.

Michelle’s expectation for students to share their unique ways of knowing increased opportunities for learners to hear alternative ideas on the topic. Furthermore, her willingness to discuss her own mistake (e.g., viewing a student’s contribution as off topic) with the class bolstered the creation of a “public space,” which Giroux (1997) describes as “a concrete set of learning conditions where people come together to speak, to dialogue, to share their stories, and to struggle together within social relations that strengthen rather than weaken the possibility for active citizenship” (p. 106). Through this IC episode, Michelle promoted students’ willingness to make their lived experiences and ways of thinking public for the rest of class. Her interactions communicated to students that she was with them on this shared learning journey.
Episode 10: Using Gestures to Generate Ideas

Episode 10 also occurred in the ELA lesson introducing the topic of baseball. The students were seated in new small teams to which they had been assigned. Each team had a logo of a different baseball team (e.g., KC Royals). The students were documenting their background knowledge connections to baseball on their team posters. The teacher was circulating among groups as they worked. Episode 10 began as Michelle approached a small group of learners. The transcription of this episode is provided in Appendix Q. The sections that follow provide the findings related to each level of analysis.

Episode 10 Description Phase: Digging into the Text

This particular episode of IC was selected due to the teacher’s efforts to maximize gestures in order to elicit students’ ideas and language use. Episode 10 illustrated the teacher engaging in a variety of practices to support students to dig deeply into their background knowledge and document as much as possible on their team tool. Gestures made by both the students and the teacher played a key role in the conversational interactions. For instance, when the teacher took a seat with the first group she visited, she began by revoicing Michael’s word “pose” (turn 3). She then asked him to elaborate on what he meant by the word. In response, he gestured as though he were holding a baseball bat and getting ready for a pitch (turn 4). Michelle built off this gesture saying, “Okay, now, so make some connections onto that. You just gave me a lot of ideas. You know it’s holding a.” Michael provided the missing word “bat” and reached to write on the poster. The teacher offered an alternative meaning of the word in contrast to its actual definition in the context of baseball: “But what kind of bat? Like a furry: black animal bat?” (turn 7). Offering this absurd idea also served to inject humor into the learning. The question was met by smiles from two group members, including Sarah who clarified “baseball
bat” (turn 8). The teacher further elicited ideas in turn 9 by asking, “. . . and you just said you’re standing in what? ((points to Michael’s side of the table)) Mud? What? ((Sarah and Michael write on the group poster)).”

The teacher also used gestures to spark ideas that students could then document on their poster. For example, as Michelle collaborated with a different small team, she made a similar pose of holding a bat, added the motion of swinging the bat, and indicated the length of the bat to elicit language (turn 35). She additionally acted out turning to see a row of extra bats (turn 39), and she raised her hand to act out cheering for a team that made a home run (turn 41).

Throughout her interactions with students, Michelle frequently used revoicing to reinforce the importance of students’ language use and ideas, at times prompting for elaboration or a rationale (see turns 3, 7, and 31). Across the episode, Michelle revoiced in 12 of her 23 turns (52%). She further sought to bolster students’ ability to document their connections by reminding them that they could use pictures, especially if they didn’t “exactly know what it’s ca:lled” (turn 6).

Michelle was attentive to individual learners. She made a connection to the home state of one student in turn 21, indicating that she remembered this piece of his personal biography. She asked if he knew name of the professional baseball team in Colorado. When he responded instead with “Broncos,” she stopped herself from disconfirming his answer and instead affirmed that the name he had provided was actually the name of the professional football team. She also attended to building up the general classroom community through her overall positive demeanor (e.g., frequent smiles), use of proximity (e.g., turns 1, 3, and 13), and interjections of humor (e.g., see baseball pun in turn 10).
Episode 10 Interpretation Phase: Exploring the Situation

The field of Episode 10 reflected IC in an ELA lesson focused on the topic of baseball. The goal of this IC, segmented into chunks that reflected the teachers’ interactions with various teams and students as she circulated among the learners, was to foster their connections to background knowledge (Herrera, 2016). Students engaged in the activation process by brainstorming and documenting their ideas about baseball on their team “connection poster.” This poster functioned as the “tool in the hand” (Herrera et al., 2017, p. 149) that mediated the learning process and scaffolded students’ use of language. Because students used different colors of writing utensils (a practice encouraged by Herrera and colleagues [2017]), the teacher also was able to see what each individual was contributing to the poster.

The tenor of the situation included the subject positions of teacher and student. Michelle minimized her physical distance from learners in order to more fully engage in conversation. For instance, with the first team, she leaned down toward the group and then proceeded to sit at the open desk. During her interactions with a subsequent group, she leaned down on an empty desk as she conversed. Michelle also looked out for the wellbeing of the members of the learning community, suggesting a change in desk arrangement, for example, so that each team would have a level surface on which to write. She then checked back with the group to make sure that everyone was okay. She supported the equal participation of team members (Herrera, 2016), as evidenced when she repositioned the poster of one team in the center of the table so that each teammate could easily reach to record ideas.

As discussed in the previous phase, Michelle used humor in multiple places to add levity to the learning process. She further used her knowledge of students’ biographies (Herrera, 2016) to inform her IC interactions. As Michelle expressed:
just going back to knowing who they were. Like I knew Nathan (pseudonym) was from Colorado. Um, that little girl, Olivia (pseudonym), she did cheer, cheerleading. And so just going back to a little bit what they knew.

When engaging with learners, Michelle tried to connect with them both as individuals and as students. For her, that meant making connections to their lives and experiences outside the classroom.

The mode was reflective of activity in which language had a constitutive role. The teacher used spoken language and nonverbal communication to express ideas, revoice connections, and prompt students to think more deeply about their background knowledge (Herrera, 2016). At times she asked individual students direct questions (e.g., “So, Antonio, when you hear “baseball,” what do you think about?”). At other times she paused her speech to allow learners to join in (e.g., “So, if you, if they hit a home run, you’re definitely gonna be saying, ~“Go, ‘t’”, with the intent of students adding the word “team.”).

Students used spoken language to discuss their ideas, and at times augmented their oral expression with gestures. Michelle encouraged them to use written language as well as non-linguistic representations to document their connections. Allowing learners to utilize non-linguistic representations is a BDI practice especially encouraged for teachers supporting emergent bilinguals (Herrera, 2016). Reflecting on how she emphasized the use of pictures, Michelle noted:

A huge thing [noticed in the video] that has become even more prevalent now, is the pictures. . . . I would say almost . . . 50 to 60% of my kids literally cannot write, and so we rely on sketches a ton. And, and that's a way they can still communicate and feel like they're participating.
All students, including those in the early stages of developing English literacy skills, therefore had multiple ways to engage during this episode.

**Episode 10 Explanation Phase: Connecting to Social Practice**

In classrooms that over-emphasize the importance of emergent bilingual students developing English language skills, CLD learners have limited opportunities to share what they know, engage with rigorous grade-level content, and demonstrate what they have learned. Such settings reflect a deficit perspective toward multilingual learners; English is the norm for communication, and emergent bilinguals find themselves disconnected from the learning process and unable to leverage the wealth of assets they bring (Krastel, 2021; Mellom et al., 2018). In addition to maximizing the native language, teachers can broaden access to the content and increase participation opportunities for emergent bilinguals by using (and encouraging student to use) visuals, gestures, and body language (Herrera, 2022; Krastel, 2021; Martin-Beltrán et al., 2017; Ünsal et al., 2018).

In this episode, Michelle made generous use of gestures throughout the IC. Her modeling of words and ideas using extralinguistic means encouraged learners to use multiple forms of communication as well. She explicitly invited students to use pictures to support their expression of ideas as they documented background knowledge connections on their learning tool (i.e., team connection poster). Michelle’s knowledge of learners’ individual biographies informed her decisions about which ideas to emphasize with particular students. For example, she made connections to cheering (which she also physically acted out) because she knew one learner was involved in cheerleading. Her efforts to connect to students’ identities reflected Michelle’s expressed commitment to bringing students into the learning process.
**Episode 11: Showcasing Student Success**

Episode 11 was the final portion of IC selected from the ELA lesson focused on baseball. After having had the opportunity to collaborate as members of a small team, students in this episode had a chance to select an idea they wanted to share with the entire class. Episode 11 began as the teacher was standing at the front of the room providing directions to the students, who were seated at desks with their teammates. The transcript for this episode is provided in Appendix R. The subsequent sections discuss findings related to each level of analysis.

**Episode 11 Description Phase: Digging into the Text**

I selected this IC episode for further analysis due to the multiple ways the teacher affirmed students and highlighted their success in the classroom. In this episode, the teacher found many ways to spotlight what students produced. The first portion of the episode centered on students selecting and documenting one background knowledge connection on a sticky note that they would then add to the class poster. Michelle specifically directed learners, “I want you to pick the **most** important thing you put on your poster yourself.” (turn 1). Her directive that this needed to be a connection the student had personally made ensured that all learners got to physically add their words/ideas to the collective class poster. She reassured learners that they could add basic words (e.g., baseball, baseball bat) if needed (turn 3), likening this basic level of background knowledge to her own starting place with this topic. She also indicated that learners could keep their sticky notes anonymous if they wanted (turn 1). At the same time, however, Michelle challenged students to put forward their “best” connection (turns 3 and 16) and shared that she wanted everyone, including herself and the ESOL teacher, to “stretch ourselves” (turn 3).
As students engaged in the task, one learner even asked for permission to write two ideas on the sticky note. Michelle jokingly responded that she would “let” the student have more than one thing on the sticky note. Another learner was excited to tell the teacher, “Mine is silly” (turn 21). Michelle later revoiced this connection, noting for the class that she knew the sticky note with “hotdogs” and “family” was Bethany’s (turn 48). In fact, Michelle revoiced both spoken and written ideas throughout this episode. Especially noteworthy was an instance (turns 69-70) when she encouraged students to revoice a classmate’s idea (e.g., that fans are supporting the team). She then revoiced and affirmed the connection herself: “Supporting them. I like that.” At another point in the lesson (turn 34), she revoiced and highlighted Nathaniel’s word "stadium," rather than moving forward with her own intended word "ballpark." She shared with the class, “I really like that word better. Stadium.”

Michelle nurtured the shared classroom community by adding an element of silliness. For example, she used humor in turn 42 to highlight the multiple meanings of the word “fan” (turn 54). She also focused on the needs of individual learners. For instance, one student was hard pressed to finish her sticky note before the “strikeout” countdown ended (turn 22). A classmate said, “Katherine strikeout.” Recognizing the social-emotional implications of such a comment, Michelle corrected with “Just in time” (turn 25). Similarly, in turn 87, Kaylee sought clarification from the teacher regarding the name for an article of clothing that baseball players wear. Although another student (who frequently verbalized ideas) chimed in more than once with the word “jersey,” Michelle chose to not shift her attention away from Kaylee until she successfully demonstrated her understanding. Michelle then revoiced and affirmed with “Good job,” as she nodded her head (turn 93).
Episode 11 Interpretation Phase: Exploring the Situation

The field of Episode 11 reflected an IC that took place largely within the context of whole-group discussion in an ELA lesson focused on the topic of baseball. The goal of this portion of the lesson was to highlight the distributed knowledge of the classroom community on a single large poster. Students used sticky notes to document the idea(s) they individually selected from their small team “connection poster.” The class poster thus became the primary mediation tool (Kozulin, 2003; Vygotsky, 1978) that supported additional learning processes, such as the sorting and grouping of sticky notes according to commonalities and the teacher’s revoicing of selected connections.

The tenor of the situation included the subject positions of teacher (Michelle), ESOL co-teacher (Miss Martin), and student. Through her interactions, Michelle positioned all members of the classroom community as knowledgeable contributors. Michelle served as the lead facilitator of the learning process, with Miss Martin supporting. For example, Miss Martin sorted the sticky notes by “common threads” (turns 19, 29). Michelle then selected which sticky notes she would highlight from the groupings that Miss Martin suggested. The students in the class were treated as equal members (Herrera, 2016), which was reinforced through the design of the activity.

By sitting on the floor on the “perimeter” along with students, and also by contributing her sticky note to the class poster, Michelle actively worked to reduce the physical and social distance between herself and the students. She frequently used language (e.g., inclusive pronouns such as we, we’re, our, we’ve) to similarly reduce distance. One particular use of such pronouns was especially significant for the tenor of the situation. Michelle explained the goal of the activity saying, “And we’re gonna collectively make a big ((moves arms to indicate the entire class poster)) poster of all of our knowledge—what we know about ((pauses for students to join
in)),” and a student supplied “baseball.” Through her language, Michelle emphasized the combined knowledge that the classroom community members together brought to the topic. She also fostered rapport with the students by adding an element of silliness (e.g., making a face and waving a finger like she was wearing a foam finger). At another moment, she referenced Amelia Bedelia and asked, “that kind of fan?” when the actual context of the word related to sports fans. Michelle explained in the interview that such instances also allowed her to point out the different meanings of words (e.g., homonyms), which might otherwise be confusing for English learners.

The mode of the situation was reflective of the constitutive role of language. The teachers used spoken language to provide directions, offer support, sort background knowledge connections, revoice, and so forth. They also relied on the written word (as documented on the sticky notes) to ascertain how students were individually and collectively connecting to the topic. Students likewise used spoken language to share ideas and respond to questions. They each had an opportunity to write their selected connection(s) on a sticky note for inclusion on the class poster. Classroom community members also employed gestures (Herrera, 2016) at times to increase the comprehensibility of their message (e.g., Kaylee gestured putting on a piece of clothing, referring to a jersey).

**Episode 11 Explanation Phase: Connecting to Social Practice**

Classrooms traditionally have employed an individualistic view of cognition as a process that occurs “in the head” (Hewitt & Scardamalia, 1998, p. 75). As a result, the emphasis is on individual students’ engagement in academic activities/tasks and their individual demonstration of knowledge and skills. When cultural hegemony is the norm in U.S. schools (Gay, 2018), this leaves CLD learners at a distinct disadvantage. Dominant European American assumptions, expectations, and practices ungird schooling (Gay, 2018), which means that CLD students’ ways
of being, knowing, and interacting frequently are viewed as irrelevant or as useful only as resources for attaining normative standards of success (Alim & Paris, 2017). An alternative view emphasizes the distributed nature of cognition (e.g., learning through collaboration with others engaged shared social practices) (Hutchins, 1995). The related concept of distributed expertise (Brown & Campione, 1996) is reflected in classroom ecologies that foster students’ ability to recognize multiple forms of expertise, maximize their own and others’ competence, and collaborate in activity toward a common goal.

In this episode, Michelle’s IC practices promoted distributed cognition and heavily emphasize distributed expertise. Students offered their selected background knowledge connection(s) to support the learning of the classroom community. All community members, including the teachers, contributed to this collection of ideas. Michelle highlighted that the large poster of sticky notes reflected the accumulated knowledge of the group. The class discussed common threads among ideas, and Michelle affirmed that the community definitely possessed background knowledge about the topic.

Michelle reflected upon these instructional practices during the interview. She noted that she had devoted an entire lesson, including the portion captured in this episode, to building/activating background. She contrasted her past use of ELA instructional time with her current dynamics. The district-mandated decoding routine has reduced the time that she has available for supporting student comprehension. She relayed that she asks herself, “How can I incorporate my BDI strategies into the district mandates, you know? Like, how can I finagle this?” She expressed that she tries to think “outside the box” in order to meet the challenge of engaging learners in biography-driven ways while also complying with district and building expectations. Michelle recognized the multiple factors at play as she explained:
I do think that the decoding routine is good. I like it. I just think, I wish they would give us a little more flexibility on it, maybe, and it not have to go into that ELA time. But scheduling is hard. I mean there's no easy [solution].

Michelle’s use of BDI strategies was not limited only to ELA time, however. She referenced, for instance, frequently using BDI strategies in her science and social studies time as well. When asked about the degree to which colleagues influence the way she utilizes instructional conversations, she responded,

[I]t’s huge. . . . it’s just nice because we all believe and have buy-in to that [BDI]. And we all know the strategies, and . . . we all do ‘em a little bit different. . . . it's almost just like . . . a lingo almost between us.

Michelle thus perceived colleagues who likewise use BDI to be a tremendous source of support for her own implementation efforts.

**Synthesis of Findings**

In this section, I synthesize the primary findings from this PDA study. The discussion is structured to respond to each of the research sub-questions. Additional discussion of the transformative potential of BDI ICs in the analyzed episodes is then provided.

**Findings Related to Research Sub-Question 1**

The first research sub-question, which was connected to the description phase of analysis, was: *What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?* In utilizing Fairclough’s (1989) list of ten primary questions that can be asked of a text (Appendix F), it became evident across the 11 IC episodes that five questions routinely had relevance for the texts. They related to the vocabulary, grammar, and textual structures present in the linguistic form of the discourse. These questions are provided in
Table 4.2, along with examples of how each was relevant to the IC texts. Together, these examples point to patterns in discourse that occurred in the classrooms where teachers were implementing BDI. Through these episodes, teachers emphasized the value of each individual learner and the unique ways of knowing (e.g., background knowledge) that he or she brought to the community. The fostering of relationships and students’ positive self-concept was a commonality across classrooms. Discourse was also used to elevate the caliber of thought, ensure the equitable engagement of all learners, and support attainment of the lesson goals.

My use of Fairclough’s questions to guide the description phase of analysis revealed one primary limitation. Fairclough (1989) references “visuals” that frequently accompany verbal language (p. 27). By visuals he is referring to facial expressions, gestures, movement, and posture that might complement the verbal (and in this case, spoken) language of the text. Such visuals can have significant implications for the meaning of the text. However, there were no questions to support analysis of such visuals. I was able to relate gaze to Question C9 (i.e., What interactional conventions are used?) because of the way Abby used her gaze to include learners in the small group conversation. Teachers’ use of proximity, gestures, and motions, however, remained outside the analysis framework provided by Fairclough. As such, I recorded these separately. Expansion of Fairclough’s list of questions to accommodate visuals (i.e., nonverbal, communication) would support future analyses utilizing this approach.
<table>
<thead>
<tr>
<th>Question</th>
<th>Examples of Relevance to the Text</th>
</tr>
</thead>
</table>
| A1. What experiential values do words have? | - Assumption that students did possess background knowledge on the topic, and celebration of that knowledge  
- Recognition that students brought different ways of knowing, and each was equally valued  
- Positioning students as capable thinkers, learners, and decision makers |
| A2. What relational values do words have? | - Provision of a risk-free environment (e.g., it was okay to not know)  
- Choices in language that fostered a positive self-concept among learners  
- Terms of endearment/address  
- Use of humor to foster a positive classroom ecology |
| B6. What relational values do grammatical features have? | - Use of inclusive pronouns to create a sense of community and to reflect collective ability and engagement  
- Use of questions to guide student thinking and engagement in a task  
- Use of questions to seek confirmation that learners remember the risk-free nature of activation and the value of all background knowledge connections |
• Use of questions to elicit sharing, elaboration, or clarification of ideas

B8. How are (simple) sentences linked together?
• Reference to student ideas previously heard/observed in the lesson to advance the learning of the classroom community
• Reference to past learning outside the current lesson
• Reference to past experiences shared by the classroom community

C9. What interactional conventions are used?
• Pauses in speech designed to encourage students to use language and engage in the conversation
• Revoicing of student ideas to reinforce the importance of what was shared
• Revoicing that elicits elaboration, a rationale for the idea, or the source of the background knowledge
• Use of language to ensure all learners have equal opportunities to contribute to the learning process
• Use of gaze to support inclusion of learners in the conversation
Findings Related to Research Sub-Question 2

The second research sub-question, which was aligned to the interpretation phase of analysis, was: *In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?* Field, tenor, and mode (Halliday, 1978; Halliday & Hasan, 1985) proved useful constructs for ensuring consistency of analysis processes during this phase. Given the central role of relationship-building in BDI, I anticipated that tenor would play a defining role in the register of IC texts. Likewise, because BDI encourages teachers to bring all learners into the meaning-making process of the classroom community, I anticipated mode would also have an influential role in characterizing the classroom interactions. However, I underestimated the role of the field to affect BDI teaching and learning situations.

With regard to field, the materials used during the analyzed episodes had significant value as tools for mediating the learning of individual students and the collective classroom community. The tools were connected to instructional processes that centered on supporting students to (a) activate their individual background knowledge (i.e., knowledge from home, community, and school), (b) generate and negotiate ideas through interactions with peers, and (c) make knowledge and ideas public so they could be leveraged by the classroom community. The accumulated expertise informed ongoing meaning-making processes and provided a foundation for subsequent learning. Table 4.3 identifies the specific tools of mediation for each episode and includes the type of grouping structures (e.g., whole group, partners, small group, individual) utilized. A brief description of each tool is provided in Appendix S. Figure 4.1 illustrates a mediation tool used by students to document individual connections to background knowledge in collaboration with small team members (i.e., connection poster). It also includes a mediation tool used to collect ideas representative of the whole class (i.e., class connection poster).
Table 4.3. Tools of Mediation and Grouping Structures by Episode

<table>
<thead>
<tr>
<th>Episode</th>
<th>Mediation Tool</th>
<th>Grouping Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DOTS chart</td>
<td>Whole group</td>
</tr>
<tr>
<td>2</td>
<td>DOTS chart and U-C-ME template</td>
<td>Small group, whole group</td>
</tr>
<tr>
<td>3</td>
<td>DOTS chart</td>
<td>Whole group</td>
</tr>
<tr>
<td>4</td>
<td>Vocabulary Quilt</td>
<td>Small group</td>
</tr>
<tr>
<td>5</td>
<td>Linking Language posters</td>
<td>Whole group, small group</td>
</tr>
<tr>
<td>6</td>
<td>DOTS chart</td>
<td>Whole group, partners</td>
</tr>
<tr>
<td>7</td>
<td>DOTS chart</td>
<td>Whole group, partners</td>
</tr>
<tr>
<td>8</td>
<td>Tic-Tac-Toe board</td>
<td>Small group</td>
</tr>
<tr>
<td>9</td>
<td>N/A (tool only introduced)</td>
<td>Whole group</td>
</tr>
<tr>
<td>10</td>
<td>Connection poster</td>
<td>Small group</td>
</tr>
<tr>
<td>11</td>
<td>Class connection poster</td>
<td>Whole group, individual</td>
</tr>
</tbody>
</table>

Figure 4.1. Sample Mediation Tools

![Connection Poster](image1)

![Class Connection Poster](image2)
Patterns in the tenor of BDI teaching and learning situations included participants’
observable efforts to minimize both the physical distance (e.g., through sitting, kneeling,
crouching, or stooping) and the social distance (e.g., through use of inclusive pronouns) between
themselves and learners. Students were positioned as knowledgeable, capable, and integral to the
functioning, wellbeing, and success of the classroom community. Teachers fostered a safe
classroom ecology and used humor to build rapport and make learning more joyful. They
allowed themselves to be vulnerable (e.g., trying to say words in other language), positioned
themselves as learners (e.g., acknowledging mistakes, admitting limited background knowledge
on a topic), and demonstrated their authenticity (e.g., through discussing life experiences). They
also disrupted the typical teacher-student script by engaging in reciprocal exchanges with
learners and periodically positioning students as the authoritative experts (e.g., regarding the
spelling and meaning of words in other languages). Teachers engaged in the learning process
along with the students. They also guided students to see their peers as resources and intervened,
as necessary, to ensure all students were able to engage as equal contributors.

Commonalities in mode were also found in across episodes. For instance, language
played a constitutive role in every episode that occurred in the three classrooms. The IC
situations involved primarily spoken and written language. However, gestures and body
language also were used by both students and teachers to complement verbal communication.
Teachers, for example, used gestures/body language to increase comprehension, encourage
engagement and language use, and promote idea generation. Another significant finding was the
degree to which all students engaged in the linguistic processes of the classroom. The mediation
tools served to scaffold such participation. Even in instances when learners might have elected to
not voice their ideas aloud, they utilized their individual tools to document ideas in writing or through sketches/pictures/illustrations.

**Findings Related to Research Sub-Question 3**

The third research sub-question, which related to the explanation phase of analysis was: *What institutional factors challenge and support culturally responsive/sustaining discourse practices?* During their interviews, the three teacher participants provided their individual perspectives on institutional factors that have influenced, or currently influence, their ability to utilize biography-driven practices, including ICs. They were encouraged to consider factors at the building, district, state, and national level. For the most part, responses centered on only district and building factors. However, one participant also commented on the influence of the state (e.g., pressure to increase standardized test scores). Table 4.4 summarizes the factors that were perceived to support or inhibit transformative IC in CLD classrooms.

**The Transformative Potential of BDI ICs**

The explanation phase of analysis involves making connections to societal, institutional, and situational power relations and ideological assumptions. The researcher considers social determinants that influenced the discourse as well as the effects of the discourse in relation to ongoing struggles at situational, institutional, and societal levels (Fairclough, 1989). The findings of this study revealed multiple social determinants that were connected to each IC episode. Many of these social determinants reflected hegemonic influences (e.g., cultural, linguistic) and deficit perspectives. Others were related to typical interaction patterns found in U.S. classrooms. However, given that I approached this research from a PDA perspective, I also identified the multifaceted ways in which the IC episodes provided examples of “the discourse we like rather than the discourse we wish to criticize” (Macgilchrist, 2007, p. 74).
Table 4.4. Institutional Factors Influencing Transformative IC

<table>
<thead>
<tr>
<th>Supporting Transformative IC</th>
<th>Inhibiting Transformative IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communicated districtwide priority on placing students first</td>
<td>• District-mandated scripted programming</td>
</tr>
<tr>
<td>• Allocation of school resources (e.g., staffing) to foster culturally responsive practices</td>
<td>• State and district pressure to increase standardized achievement scores</td>
</tr>
<tr>
<td>• District focus on oral language development</td>
<td>• Normative expectations and standards for academic performance</td>
</tr>
<tr>
<td>• Building administrator validation of teacher BDI implementation</td>
<td>• Teacher narrowing of the curriculum in response to district focus on standards-based proficiency scales</td>
</tr>
<tr>
<td>• Building administrator commitment to increasing student talk time</td>
<td>• Time limitations due to instructional schedule</td>
</tr>
<tr>
<td>• Flexibility and authority provided to teachers to determine the most effective learning path</td>
<td>• Administrative pressure to comply with district initiatives</td>
</tr>
<tr>
<td>• Collegial support of fellow BDI implementers</td>
<td></td>
</tr>
</tbody>
</table>

Across the episodes, transformative influences often reflected aspects of an asset perspective on CLD students and emphasized pluralism (e.g., linguistic, epistemological). The teachers’ ICs illustrated how educators can create educational spaces that foster students’ sense of belonging and positive self-concept. The episodes highlighted ways teachers can collaborate with students to leverage the expertise of all members of the classroom community toward
collective learning and success. Processes that ensured equitable participation among all members of the community also were identified as transformative influences. Table 4.5 provides the social determinants and transformative influences related to each of the IC episodes analyzed in this study. It additionally includes theory to support the types of transformative practices that educators can leverage to further the goal of social transformation.

**Summary**

This chapter provided the findings that emerged from this research on the IC practices utilized by BDI teachers. I first provided a brief summary of data collected and then offered a snapshot of the teacher participants and the learners in their respective classroom communities. The chapter included the detailed findings for each of the 11 episodes that resulted from discourse analysis using Fairclough’s (1989) three-part progression (i.e., description, interpretation, and explanation). Within this chapter I provided a synthesis of findings to support a more holistic understanding of the research outcomes. The discussion addressed each of the three research sub-questions that collectively answered the guiding research question: *In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?* I concluded the chapter with a discussion of the transformative potential reflected in the IC episodes that occurred in the CLD classrooms.

In Chapter 5, I discuss the conclusions and implications of this study, given the research findings. I provide reflections on the limitations of the study as well as considerations for future research. Recommendations for the field additionally are offered.
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Episode</th>
<th>Theme</th>
<th>Social Determinant</th>
<th>Transformative Influence</th>
<th>Theory to Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>1</td>
<td>Students as Learners and Experts</td>
<td>linguistic hegemony; typical teacher-student script</td>
<td>linguistic pluralism; teachers and students as collaborators</td>
<td>translanguaging (e.g., García, 2017); liberatory praxis (Freire, 1970/2005); positioning theory (e.g., Harré &amp; van Lagenhove, 1999)</td>
</tr>
<tr>
<td>Abby</td>
<td>2</td>
<td>The Power of Visual/Nonverbal Communication</td>
<td>deficit perspectives; Othering of English learners; pathologizing of race/ethnicity; student-first mentality</td>
<td>asset perspective; sense of belonging; humanistic focus</td>
<td>relational care (Noddings, 2013); authentic cariño (e.g., Curry, 2021; Valenzuela, 1999)</td>
</tr>
<tr>
<td>Abby</td>
<td>3</td>
<td>Bridging from the Known to the Unknown</td>
<td>deficit perspectives; hegemonic education system</td>
<td>positive student self-concept; sense of belonging</td>
<td>biography-driven instruction (Herrera, 2022); opportunity structures (Gray et al., 2018);</td>
</tr>
<tr>
<td>Abby</td>
<td>4</td>
<td>Learning through Reciprocal Exchanges</td>
<td>typical teacher-student script</td>
<td>equitable sharing of ideas and perspectives; opportunities for student talk; critical stance</td>
<td>dialogic teaching (e.g., Applebee et al., 2003); third space (e.g., DiGiacomo &amp; Gutiérrez, 2017)</td>
</tr>
<tr>
<td>-------</td>
<td>------------</td>
<td>--------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Leticia</td>
<td>5</td>
<td>Listening to Learners and Building Community</td>
<td>deficit assumptions about background knowledge; inequity in classroom participation</td>
<td>assumption that all learners possess background knowledge; students as equal contributors</td>
<td>critical consciousness (Freire, 1970/2018); democratic classrooms (e.g., Dewey, 1923)</td>
</tr>
<tr>
<td>Leticia</td>
<td>6</td>
<td>Learning as a Shared Venture</td>
<td>individualist classroom dynamics</td>
<td>collectivist classroom dynamics</td>
<td>sharing and borrowing ideas (Herrera et al., 2017)</td>
</tr>
<tr>
<td>Leticia</td>
<td>7</td>
<td>Allowing Students to Discover for Themselves</td>
<td>imbalance of teacher/student talk time; passive learners</td>
<td>increased student talk; learners as active constructors of knowledge</td>
<td>i+TpsI grouping (Herrera et al., 2017); structures/configurations (Herrera, 2022)</td>
</tr>
<tr>
<td>Michelle</td>
<td>8</td>
<td>Linking to Life</td>
<td>separation of official and unofficial spaces</td>
<td>collaboration of teacher and students to leverage their combined knowledge and experiences</td>
<td>third space (e.g., Gutierrez et al., 2003); teacher authenticity (e.g., Plust et al., 2021)</td>
</tr>
<tr>
<td>Michelle</td>
<td>9</td>
<td>Teachers as Learners Who Make Mistakes</td>
<td>epistemic hegemony; minimizing/silencing student voices</td>
<td>sharing and maximizing multiple ways of knowing and student voices</td>
<td>epistemic friction (Medina, 2013), public space (e.g., Giroux, 1997)</td>
</tr>
<tr>
<td>Michelle</td>
<td>10</td>
<td>Using Gestures to Generate Ideas</td>
<td>deficit perspectives; English communication norms</td>
<td>asset perspective; multiple ways of communicating ideas</td>
<td>visuals, gestures, and body language (e.g., Herrera, 2016; Martin-Beltrán et al., 2017; Ünsal et al., 2018)</td>
</tr>
<tr>
<td>Michelle</td>
<td>11</td>
<td>Showcasing Student Success</td>
<td>individualist perspectives on cognition/classroom dynamics; cultural hegemony</td>
<td>collectivist classroom dynamics; all community members jointly leverage individual and collective ways of knowing</td>
<td>distributed cognition (Hutchins, 1995); distributed expertise (Brown &amp; Campione, 1996)</td>
</tr>
</tbody>
</table>
Chapter 5 - Conclusions and Discussions

In this chapter, I first provide an introduction that summarizes key issues which served as the impetus for this research. The introduction also includes a brief recap of the study. I then provide conclusions that can be drawn from the findings. I discuss implications of the research, limitations of the study, and directions for future research. I conclude the chapter with recommendations for the field.

Introduction

The nation and student populations in U.S. public schools continue to become increasingly racially and linguistically diverse (Irwin et al., 2021; NEA, 2015). At the same time, inequity in educational opportunities persists, as evidenced by disparities in academic outcomes among CLD subgroups of learners (NCES, n.d.). Research has demonstrated, however, that teachers who engage with students through an asset perspective positively influence outcomes for CLD students (e.g., Bristol & Martin-Fernandez, 2019; Darling-Hammond et al., 2020; Gay, 2018; Sampson & Garrison-Wade, 2011). Educators working from an asset perspective view students as individuals who bring unique experiences, skills, and strengths that can be utilized in the learning process (e.g., Bristol & Martin-Fernandez, 2019; Darling-Hammond et al., 2020; Gay, 2018; Sampson & Garrison-Wade, 2011).

As detailed in Chapter 2, educational researchers have long provided the field with pedagogies designed to increase the relevance and responsiveness of curriculum and instruction for CLD learners. Among these are CRT (e.g., Gay, 2000, 2010, 2018) and CRP (e.g., Ladson-Billings, 1994, 1995, 2017). BDI (e.g., Herrera, 2010, 2016, 2022) holds distinct advantages for emergent bilinguals, due to its focus on leveraging assets associated with the four interrelated dimensions of the student biography (i.e., sociocultural, linguistic, cognitive, and academic). In
addition to providing interaction opportunities for students to share their culturally influenced knowledge and ideas with peers, BDI also guides teachers to engage in reciprocal exchanges with students in order to leverage student assets through ICs. More recently, researchers have advocated for pedagogies that intentionally focus on sustaining the languages, cultures, and literacies of CLD students and families (e.g., Alim & Paris, 2017; Paris, 2012; Paris & Alim, 2014). Paris and Alim (2014) argue that heritage and community practices can benefit all students—if brought into the learning space—because they provide learners with a basis for a more pluralistic understanding of others and the world around them (Paris & Alim, 2014).

Although biography-driven, culturally responsive/sustaining pedagogy holds promise for creating more equitable and socially just learning conditions, teachers who have not experienced this type of instruction as learners lack such lived experiences and often struggle to implement theory-into-practice applications (Young, 2010). The current study was designed to address the existing need for additional teacher guidance on how to discover and leverage students’ assets. Specifically, through this qualitative study I investigated how three teachers implementing BDI used discourse to engage with learners in the social practices of the classroom. I explored how the teacher participants invited and nurtured students’ willingness to share about and maximize the assets of their sociocultural and linguistic dimensions in particular.

For this research, I drew upon CDA methodology, guided by the work of Fairclough (e.g., Chouliaraki & Fairclough, 1999; Fairclough, 1989, 1992, 1995, 2001). However, I approached the discourse analysis study from a PDA perspective (Martin, 1999). Rather than focusing on ways asymmetries of power and hegemonic, oppressive forces determine and are determined by discourse (Hughes, 2018; Luke, 1995; Rogers & Schaenen, 2014), I instead explored “moments of hope, agency, and liberation” (Rogers & Wetzel, 2013, p. 88). My goal
was to locate positive discourses that currently remain outside the mainstream practices present in today’s typical U.S. classrooms. I was intent on searching for “new stories to live by” (Stibbe, 2018, p. 170) that have the potential to directly benefit CLD students and teachers, and indirectly the larger society.

To explore the interactional dynamics between teachers and students, I primarily utilized classroom video and individual interviews. Video of instruction that had been previously recorded in the classrooms of the three elementary teachers served as the source of IC discourse. From the videos, I selected 11 episodes that reflected “critical moments” (Calle-Díaz, 2019) in the discourse—moments characterized by the presence of “the discourse we like rather than the discourse we wish to criticize” (Macgilchrist, 2007, p. 74). I transcribed the episodes to generate texts that included the recorded language acts and key semiotic features. Classroom community profile documents, teacher profile documents, and a teacher profile questionnaire provided contextual information regarding the members of the three classroom learning communities.

I then applied Fairclough’s (1989) three-part analysis progression. In the first phase (description), I analyzed the linguistic form of the discourse (i.e., the text). During the second phase (interpretation), I explored connections between the text and the classroom situation. I analyzed how the situational context (e.g., instructional processes, teacher practices) influenced the classroom discourse. I also illuminated ways the co-constructed discourse influenced the situational context (e.g., the BDI classroom ecology). After determining preliminary findings from the first two phases analysis, I then engaged in individual interviews with the participants: Abby (4th-grade teacher), Leticia (1st-grade teacher), and Michelle (2nd-grade teacher).

In the first portion of the two-part interviews, I utilized video elicitation to gain insights into the teachers’ perspectives about the contextual and situational processes (Herrera, 2016) that
influenced the classroom discourse. I was able to share my initial findings, hear the teachers’ responses, and ask questions for clarification. For the second portion of the interview, I used a semi-structured interview protocol to determine the participants’ views regarding institutional (i.e., educational) factors at the local, district, state, and national level that influence their ability to engage with learners in biography-driven ways (e.g., using IC in the ways demonstrated in the episodes). These insights informed the final phase of analysis (explanation). During this phase, I explored aspects of the ICs that were ideological in nature and discussed how power relations at societal, institutional, and situational levels related to the discourse. I focused especially on ways the discourse of the selected episodes worked to advance transformation at the situational, institutional, and societal levels. The findings of each level of analysis were provided in Chapter 4, along with a synthesis of the findings.

Conclusions

This study was guided by the following research question and sub-questions: In what ways do grade-level teachers use instructional conversations to create culturally responsive/sustaining classroom ecologies?

1. What do the formal text properties of instructional conversations reveal about culturally responsive/sustaining discourse?

2. In what ways is classroom discourse influenced by the social practices (situational context) of the classroom ecology?

3. What institutional factors challenge and support culturally responsive/sustaining discourse practices?

The previously detailed research findings supported multiple conclusions. These conclusions are organized by research sub-questions and provided in the sections that follow.
Conclusions Related to Research Sub-Question 1

The first four conclusions related to the first sub-question and described the nature of culturally responsive/sustaining discourse.

Conclusion A: **Culturally responsive/sustaining discourse fostered relationships among members of the classroom community.** Through verbal language as well as nonverbal communication (e.g., body language), teachers communicated that they cared about learners as individuals as well as students. The discourse included connections to students’ biographies and also attended to learners’ biopsychosocial histories. Through their use of language, teachers fostered a shared sense of belonging within the classroom learning community. They used discourse (e.g., smiles, humor) to create a positive classroom ecology. They also allowed themselves to be vulnerable and demonstrated their own authenticity (e.g., by discussing life outside the classroom). The discourse revealed teachers’ positioning themselves as learners engaged with students on a shared journey toward greater understanding.

Conclusion B: **Culturally responsive/sustaining discourse positioned students as knowledgeable and capable.** The discourse in the three BDI classrooms revealed participants’ shared assumptions that all students brought knowledge that was valuable to the learning process and all students were capable of being successful. The discourse invited learners to share their multiple ways of knowing and communicated that each was equally valued. The language used reflected teacher decisions to prioritize learners’ development of a positive self-concept, especially in relation to their academic self-concept. This discourse also provided evidence of flexible shifting between student and teacher roles, as students at times were positioned as the experts (e.g., in relation native language words).
Conclusion C: **Culturally responsive/sustaining discourse created a risk-free space for sharing knowledge and ideas.** The teacher participants used discourse to communicate that all ideas “count.” Members of the learning community worked from the shared assumption that the actual relevance or accuracy of ideas would be determined throughout the learning process. The discourse encouraged students to make use of their full linguistic repertoire (e.g., through translanguaging). Nonlinguistic forms of representation (e.g., sketches) and nonverbal communication (e.g., gesture, body language) were equally valued and leveraged. In addition, not knowing was considered an acceptable response and an indication of learning opportunities.

Conclusion D: **Culturally responsive/sustaining discourse fostered equitable participation of all students.** Through their language and actions, teachers worked to ensure that all learners had equitable opportunities to engage in the learning process and voice their ideas. At times, safeguarding students’ rights meant enforcing respectful turn-taking among learners. At other moments, teachers created space for learners to communicate their ideas and demonstrate their understanding by simply providing them with the time they needed, which might have differed from that needed by other students. Teachers used discourse to ensure all students could access shared learning tools. They also modeled a commitment to learners and to democratic learning processes by *listening to understand* and honoring ideas shared.

**Conclusions Related to Research Sub-Question 2**

The next three conclusions related to the second sub-question and described how the social practices of the classroom influenced the discourse.

Conclusion E: **Use of mediation tools scaffolded engagement and language use.** In each of the three classrooms, the discourse reflected common expectations that students would activate their background knowledge and record such connections through language or non-
linguistic representations on their individual/small team learning tools (e.g., DOTS charts, Linking Language posters, Vocabulary Quilts, connection posters). These tools supported students’ subsequent discussion of ideas and negotiation of meaning as they interacted with peers. Discourse also frequently centered around a class version of the learning tool that was used to capture the distributed knowledge of the classroom community. By making the words and ideas available to the whole group, all learners could benefit from the shared wealth of knowledge.

Conclusion F: **Use of multiple grouping structures fostered student talk.** Learners in the BDI classrooms had multiple opportunities to engage in the discourse. They frequently collaborated in small teams or shared ideas with a partner. These opportunities for interaction supported perspective taking and allowed students to benefit from multiple ways of knowing. They were able to borrow ideas and collaboratively build their understanding. Whole-group conversations incorporated opportunities for individual students to share ideas with the class. All learners, therefore, had numerous opportunities to utilize their language skills for authentic communication.

Conclusion G: **Situationally attending to what students produced created opportunities to elicit and leverage assets.** Teachers actively observed as students documented ideas on their learning tools and engaged in conversation with peers. They tried to be physically near students to better see, hear, and engage with them. Because of their situational awareness, teachers were able to elicit student elaboration and rationales for the connections made. They also revoiced ideas, supported idea generation (e.g., through references to past learning, shared experiences, or conversations with other members), and guided students to document their thoughts on the learning tools. By attending to what students produced, teachers also were able
to note ideas to later revoice for the whole group. Their situational awareness allowed the participants to determine how students were making sense of the content, which informed their subsequent discourse (e.g., additional guidance provided to individual learners, small groups, or the class).

**Conclusions Related to Research Sub-Question 3**

The final conclusion related to the third sub-question and reflected participants’ perspectives on institutional factors that challenged or supported their ability to utilize culturally responsive/sustaining discourse practices.

**Conclusion H:** Building-level leadership was the most influential factor on teachers’ use of culturally responsive/sustaining discourse. Collectively, teachers described multiple factors that influenced their use of the type of discourse featured in the IC episodes. However, the influence of the building-level leadership stood out. Principals (past and present) influenced teachers by validating their implementation efforts. They reinforced shared priorities for instruction (e.g., student talk versus teacher talk). Principals also supported use of culturally responsive/sustaining discourse by affording teachers the authority and flexibility to determine the most effective teaching path for their particular classroom community. Administrator efforts to reinforce district initiatives (e.g., use of scripted decoding program) were perceived to reduce teacher use of biography-driven discourse. Participants further revealed that administrators influenced the uptake of such discourse among building teachers. One participant described, for example, the positive influence of personnel decisions that allowed other teachers to be mentored on how to engage learners in more biography-driven ways (e.g., by providing increased opportunities for interaction).
Implications of the Research

The findings of this study have numerous implications for the field. I discuss key implications in the subsequent narratives. The discussion is organized according to theoretical implications, methodological implications, and practical implications.

Theoretical Implications

From a theoretical standpoint, the composite theoretical framework for this study (detailed in Chapter 2) proved effective for interpreting connections between the IC texts and the classroom learning situations. BDI was the largest component of the composite framework. Likewise, scholarship on BDI principles, practices, and strategies (e.g., Herrera, 2016, 2022; Herrera et al., 2017) was most influential to interpreting the selected episodes of discourse. Students’ identities as learners with unique biopsychosocial histories and biographies were important to the way teachers used discourse to build relationships, amplify student voices, and leverage learners’ diverse cultures, languages, and ways of knowing. The shared nature of the learning process, with teachers jointly creating products alongside (and in equitable relationship with) students, also was theoretically supported by BDI-related constructs such as third space (e.g., DiGiacomo & Gutiérrez, 2017) and joint productive activity (e.g., CREDE, 2021).

Sociocultural theory (e.g., Vygotsky, 1978, 1981) was included in the composite framework through the emphasis on processes and tools that mediate learning. Once internalized, such tools allow individuals to gain increased control over psychological functions (e.g., attention, perception, memory) (Kozulin, 2003). In the episodes of classroom discourse, teachers used BDI instructional processes and tools primarily tied to BDI strategies to mediate learning. These processes and tools fostered student development through culturally organized interactions with others (reflective of the intermental plane); they also bolstered development on the
intramental plane as learners interacted with symbolic artifacts, such as written connections and texts, to make meaning (Lantolf & Poehner, 2008; Vygotsky, 1978).

The cycle of activation, connection, and affirmation (e.g., Herrera, 2016, 2022) was evident as students activated and shared connections between the content (e.g., curricular topics, vocabulary words) and their knowledge systems (i.e., funds of knowledge, prior knowledge, academic knowledge). Teachers maximized discourse to support learners as they built new understandings through interactions with peers and text. The participants further supported students by affirming their conceptual contributions and use of language.

The CSP aspect of the theoretical framework similarly supported interpretations of discourse designed to sustain students’ cultures and languages (e.g., Paris & Alim, 2014; Alim & Paris, 2017). Through their IC interactions, teachers fostered a pluralistic perspective on language use (e.g., translanguaging). They leveraged students’ connections to heritage and community practices (e.g., types of dance, baseball-related activities) in order to support the shared learning of the classroom community. CSP also provided a foundation for interpreting participant discourse that revealed a critical stance (i.e., colonization of indigenous territory).

**Methodological Implications**

From a methodological perspective, this study responded to the call for researchers to exemplify how language can be used for transformative purposes (e.g., Bloome & Talwalkar, 1997; Hughes, 2018; Luke, 2004; Martin, 1999, 2004). Although the deconstructive efforts of CDA are essential for explaining the current state of affairs (e.g., how injustice, discrimination, and oppression influence and are instantiated through discourse) (Caldas-Coulthard & Coulthard, 1996; Fairclough, 2013), this study instead provided examples of resistant, positive, reconstructive discourse the furthers progressive social change (Hughes, 2018; Kress, 2000). 
By employing PDA to explore how teachers used language to create equitable classroom learning conditions, this study illustrated the applicability of the method for promoting educational change.

This research further demonstrated the usefulness of Fairclough’s (1989) three-part analysis progression for analyzing discourse that occurs between teachers and students during classroom ICs. Fairclough’s guiding questions for each phase were especially helpful, given my limited prior experience with discourse analysis. Limitations of the approach centered on the lack of questions to support analysis of nonverbal communication (e.g., proximity, gestures, body language, facial expressions) embedded in the discourse. Expansion of Fairclough’s list of questions to accommodate such forms of communication would support future analyses utilizing this approach.

Use of video elicitation during the individual interviews proved to be an especially effective strategy. My interactions with the participating teachers provided the intended opportunities for exchanging perspectives on the IC episodes. However, beyond this study-driven goal, watching the video of their instruction appeared to be an enjoyable experience for the teachers. It gave them an opportunity to reminisce about experiences with the particular groups of students. Two teachers discussed the long-lasting nature of the relationships they built with learners and how they continue to remain in contact with many of the students today. The third teacher remembered specific details about learners in the classroom community that revealed the depth of her knowledge about their lives outside of school. One participant also commented that it was really nice to have an opportunity to see herself teach, since such opportunities were rare. In short, video elicitation had multifaceted benefits for this discourse analysis study and would likely be an effective strategy for future research of this kind.
Similar methods that might prove useful include photo-elicitation, photovoice, and mobile interviewing. Photo-elicitation (e.g., Walls & Holquist, 2019) involves use of photos that are taken either by the researcher or by the participants; these photos then serve as the foundation for conversation. Photovoice (e.g., Wang & Burris, 1997; Parson, 2019) engages participants in collecting photos of things that are significant to them and their lives. In the context of the classroom, this might involve students collecting pictures of tools and work artifacts that are important to them and their learning. In a similar vein, mobile interviewing (Parson, 2019; Wiederhold, 2015) involves participants physically guiding the researcher as they explain what they are illustrating. This method might support students’ explanation of key processes and other factors in their learning.

**Practical Implications**

The study findings illustrated how teachers can maximize the principles and practices of BDI and CSP through their ICs in grade-level classrooms. Of particular significance was the fact that *all* students were supported to engage successfully in the learning processes and discourse of the classroom community. Together, the learning communities included students who were below, at, and above grade level. Students included English language learners, learners receiving Special Education services, and students who struggled with behavior. Regardless of biopsychosocial factors and identity-related characteristics, all learners were able to contribute their ideas to advance their own learning and that of their peers. The classroom processes enabled students to enter into learning at their own place and pace. Furthermore, collaborative interactions allowed students to scaffold learning and model language naturally for one another.

Another significant implication of the research was the success of all three participants to enact culturally responsive/sustaining discourse. Research supports the promising potential of
teachers of Color who mirror the cultural and linguistic backgrounds of students (e.g., Carver-
Thomas, 2018; Herrera et al., 2022). However, research and scholarship frequently emphasize
the limiting, deficit-oriented practices of White teachers serving CLD learners (e.g., Hammond,
2015; Love, 2019). In this study, two of the teachers were White, monolingual, native-English
speakers. Both educators had obtained an ESOL endorsement and engaged in BDI PD, which
was designed to foster development of critical consciousness (Freire, 1970/2018) through an
emphasis on critical reflection (Herrera, 2016; Herrera & Murry, 2016). Such preparation, in
addition to their classroom experiences with CLD students, encounters with others from different
cultural and linguistic backgrounds locally and abroad, and efforts to learn a second language,
provided them with opportunities to consider their own positionalities. With these significant
experiences in mind, this study documented the potential of White teachers to positively
influence the learning of CLD students. In doing so, it also contributed to existing scholarship
indicating that when educators have opportunities to critically reflect on their own
identities/positionalities and those of others, they are better prepared to engage with students
from an asset perspective (e.g., Grant & Gillette, 2006; Herrera, 2016; Miller Dyce & Owusu-
Ansah, 2016).

The findings and conclusions additionally emphasized the need for school administrators
to support teachers to balance and integrate the multiple (and at times competing) initiatives
being implemented. The teachers in this study all worked to make BDI and related discourse a
continual priority in their classrooms. However, they struggled to different degrees to make this
possible. The communicated priority of the district was “students, standards, strategies,
curriculum.” Yet the teachers perceived that, at times, the mandated practices resulted in less-
than-ideal learning conditions and outcomes for CLD students.
This study further highlighted the power of teacher agency. Fairclough (1992) stressed that although social structures (e.g., social class, institutions, discursive norms and conventions, systems of classification) shape and constrain discourse, participants in the discourse can also exercise their own agency to act upon those social structures. In this study, the teachers used their individual agency to create more democratic, liberatory learning spaces. They challenged the discursive norms present in U.S. educational institutions, especially those at the classroom level. Despite the noted social determinants, the teacher participants used their agency to make discursive decisions that fostered social transformation.

**Limitations of the Study**

This study focused on the use of classroom video as the basis for developing texts to be analyzed. The video elicitation portion of the individual interviews also provided additional details about the recorded IC episodes. Collectively, these sources of information provided me with a fairly robust understanding of the situation that influenced (and was influenced by) the discourse. However, incorporating artifacts of student work would have allowed for more explicit analysis of discourse elements that were recorded on the mediation tools (e.g., DOTS charts, connection posters). My knowledge of what students documented was limited to what was visually captured on the video or revoiced by the teacher. An added focus on artifacts might have revealed, for example, additional uses of the native language as learners made connections to their background knowledge.

Another potential limitation of this research is the amount of time that passed between the recording of the classroom interactions and the participants’ reflections on and interpretations of the discourse events. All classroom video was recorded during the 2018-2019 academic year, the last full school year before the start of the COVID-19 pandemic. Although this allowed for
exploration of more typical classroom dynamics, it also meant that the events were less fresh in the memories of participants than might otherwise be the case. Although this did not seem to significantly impede the teachers’ ability to interpret the situational processes and interactions captured in the video, there were particular details that they were not able to recall (e.g., specifics within the text). Similarly, teachers were unable to provide clarification regarding some of the demographic characteristics of members within their classroom communities.

The participants in this study all taught at the same school site. Although this provided me with a more multifaceted understanding of institutional factors that supported or challenged the teachers’ ability to utilize culturally responsive/sustaining discourse, it also could be argued that involving teachers from additional schools or from different districts would have yielded greater diversity of perspectives. Similarly, the participants all were elementary teachers. Although they taught students at different grade levels (i.e., 1st, 2nd, 4th), their use of ICs might differ in significant ways from those of educators who teach at preschool, middle school, or high school levels. Including teachers at additional education levels might have resulted in a more comprehensive understanding of transformative discourse.

Furthermore, all classroom video used in this study was recorded in the context of ELA lessons. Although the participants referenced use of BDI in other content areas (i.e., math, science, social studies), only ELA lesson videos were available from the focal year of schoolwide BDI implementation. Analysis of IC discourse related to additional subject areas likely would have yielded a more nuanced understanding of discourse that occurs in BDI classrooms.

This study partially relied on the experiences and perspectives shared by participants during their individual interviews. I assumed that the participants were honestly providing their
thoughts and sharing their lived experiences. However, if teachers felt uncomfortable with the situation or pressured to provide particular types of responses (e.g., given my connection to BDI, or some other aspect of my positionality), then it is possible that the resulting data was flawed. Given the general comfort participants seemed to demonstrate during the interview process, however, it is more likely that the interview data reflected a relatively accurate picture of the participants’ thoughts, feelings, experiences, and perspectives.

My knowledge of BDI allowed me to engage in this study from the position of an informed outsider. Therefore, there is a possibility that my own bias skewed my interpretations of the IC discourse. Through the thick description provided throughout this study, the multiple layers of member checking utilized, and my attention to reflexivity, it is my hope that I took sufficient steps to manage my subjectivity.

**Directions for Future Research**

Additional research is needed to provide a more comprehensive understanding of culturally responsive/sustaining discourse as it is used in classrooms. For example, studies are need to explore discourse in BDI classrooms that reflect greater geographic diversity (e.g., in different schools, districts, states, and countries). Research focusing on discursive interactions at different levels of education (e.g., preschool, middle school, high school) and in different content areas (e.g., math, science, social studies) would illuminate differences and commonalities that might exist. Exploring the discourse practices of male teachers would further support a more balanced perspective on teacher–student interactions. Inclusion of student artifacts as data sources also would likely yield additional nuances in understanding.

Participants discussed the influence of the COVID-19 pandemic on their ability to maximize classroom interaction. They perceived in-person instruction, such as that depicted in
the IC episodes, as the ideal. However, recent pandemic precautions such as social distancing reduced the degree to which face-to-face instruction could incorporate the same types of grouping structures (e.g., pairs, small groups) or uses of proximity and body language (e.g., physical touch to express relational care). Many learners also regularly receive virtual instruction. Therefore, research on ways to foster culturally responsive/sustaining discourse with teachers and students in virtual settings would provide the field with additional insights into effective practices and processes.

All participants in this study had received extensive PD on the use of BDI. They had been involved in a schoolwide initiative to increase the use of biography-driven practices with the school’s diverse student population. As such, the teachers were ideal participants for this type of study, which was designed to locate and explore examples of discourse that could point the way toward more transformative educational practices. However, additional research is needed regarding factors in teacher PD (e.g., components, format, duration) that influence the development of such transformative discursive practices. For example, districts and schools would benefit from knowing whether a BDI book study that includes opportunities for critical reflection, combined with facilitated viewing and discussion of IC episodes, would be sufficient for increasing the degree of culturally responsive/sustaining discourse that occurs in classrooms.

Research on the perspectives of learners in relation to culturally responsive/sustaining discourse also is needed. This study pointed to benefits of transformative discourse for learners’ psychological wellbeing and social-emotional development. Findings revealed efforts on the part of teachers to lower students’ affective filters and support their development of a positive self-concept, including their academic self-concept. The IC discourse further demonstrated students’ willingness to share connections to their background knowledge and use trans languaging to
communicate ideas. Exploring students’ perspectives on their learning would support increased understanding of actions, uses of language, and community processes that are perceived as most influential to their learning and development. Abstract conversations on teaching and learning would likely prove only marginally effective, especially with young learners; therefore, such research might benefit from the use of interviews involving elicitation through classroom video and student work artifacts. Incorporation of photovoice (Wang & Burris, 1997; Parson, 2019) and mobile interviewing (Parson, 2019; Wiederhold, 2015) might also be useful.

Existing research and scholarship point to the importance of more intentionally engaging CLD families in the classroom learning of their children (e.g., Esteban-Guitart et al., 2019; Herrera, Porter, & Barko-Alva, 2020). Herrera and colleagues (2020), for instance, illustrate specific examples of ways teachers have encouraged parents/caregivers and family members to document their own background knowledge connections to the curriculum (e.g., topics, vocabulary words). Students then bring these ideas into the classroom where they become part of the community discourse. PDA research on teacher and student discourse that maximizes the contributions of CLD families would support teacher efforts to sustain and leverage the cultures, languages, literacies, and ways of knowing represented by the extended learning community.

**Recommendations for the Field**

The findings and conclusions of this study provided the foundation for a variety of recommendations for the field. Many related to K-12 schools. Others pertained to teacher preparation programs. I discuss these groups of recommendations in the sections that follow.

**Recommendations for K-12 Schools**

Policymakers seeking to provide guidance on effective pedagogical practices must consider ramifications for different student populations. This study illustrated, for example, that
the use of scripted programming designed to support development of decoding skills might hinder teachers’ efforts to utilize biography-driven practices that promote culturally responsive/sustaining discourse. For CLD students, especially emergent bilinguals who are developing English as a second language, a greater focus on instruction contextualized in their lived experiences might be appropriate. At a broader, more holistic level, policymakers must consider the standards by which student success is measured. Critical reflection on (a) the assumptions that ungird current standards and expectations and (b) evidence-based patterns in student performance as measured against those standards and expectations, might reveal the need to explore expanded definitions of student success.

At the administrative level, district leaders and principals have a large role in making decisions about initiatives and their implementation. The participants’ varied experiences with managing the divergent and frequently competing demands of initiatives and educational priorities indicated that there are opportunities to enhance sensemaking (e.g., Rom & Eyal, 2019; Weick, Sutcliffe, & Obstfeld, 2005) for classroom teachers. By supporting teachers in the development of creative ways to simultaneously achieve the goals of initiatives while maintaining a “students first” focus, administrators can bolster effective, site-specific applications of research and theory.

This study also included the promising finding that, if appropriately prepared, White, monolingual, English-speaking teachers as well as teachers of Color can approach instruction from an asset perspective and utilize discourse in culturally responsive/sustaining ways. Therefore, administrators are encouraged to provide opportunities for PD that supports teachers to (a) understand their own identities/positionalities and those of others, (b) implement biography-driven processes (e.g., activation, connection, affirmation), (c) maximize student
interaction opportunities, and (d) utilize of mediation tools to scaffold learners’ individual and collective learning.

Classroom teachers likewise can benefit from the findings and conclusions of this research. The participants in this study developed positive, caring relationships with learners. Such relationships were fostered through discursive practices and likewise had an influence on the classroom discourse. Knowing learners as individuals was key. Classroom teachers can gain insights into students’ biopsychosocial histories and their individual biographies by providing consistent, risk-free opportunities for learners to document and share connections between their background knowledge and the curriculum (e.g., topics, concepts, vocabulary words). Utilizing mediation tools (e.g., DOTS charts, Linking Language posters) across the three phases of lesson delivery (i.e., activation, connection, and affirmation) can provide valuable insights into students’ ways of knowing and lived experiences.

Observation of what students were producing (e.g., writing/sketching on their learning tools, orally discussing ideas with peers) provided participants entry points for understanding how students were processing curricular content. The educators could then revoice and ask questions to elicit elaboration, clarification, or rationales for particular ideas. Teachers are encouraged to provide regular opportunities for students to interact with peers, especially in pairs and small teams, to increase the quantity of student talk; increasing the proportion of student talk in the classroom will yield increased opportunities to gather insights about individual students and their learning.

This study illustrated multiple ways that teachers used discourse to create culturally responsive/sustaining classroom ecologies. These included teacher actions and language that revealed their willingness to be vulnerable, humble, and authentic. Educators are encouraged to
allow students to see them as learners and as individuals beyond their role as teachers. Similarly, teachers are urged to utilize humor, proximity, body language (e.g., smiles), and inclusive pronouns (e.g., we, our) to build rapport and a shared sense of community. Teachers should ensure that students have equal opportunities to contribute to the learning process. Allowing students to maximize their full linguistic repertoire (e.g., through translinguaging), listening to understand, and safeguarding equitable turn-taking among learners are ways teachers can create more equitable learning spaces.

**Recommendations for Teacher Preparation Programs**

Preparing preservice and inservice educators to effectively serve the needs of CLD learners, including emergent bilinguals, requires attention to their knowledge, skills, and dispositions. The participants in this study included a bilingual Latinx teacher as well as two White monolingual English-speaking teachers. As evidenced by their ongoing use of BDI strategies, tools, and processes, all participants benefited from receiving PD particular to understanding and leveraging learners’ biographies (i.e., sociocultural, linguistic, cognitive, and academic dimensions). Programming for all teachers, including teachers of Color, should include an explicit emphasis on ways to implement culturally responsive/sustaining pedagogy.

This study further revealed the transformative potential of discourse that engages learners from an asset perspective. Patterns in discourse emphasized, for example, ways teachers encouraged and scaffolded students’ activation of their background knowledge. They illustrated the importance of using multiple grouping structures to maximize distributed cognition and increase opportunities for student talk. Through discourse, teachers developed a shared sense of community within the classroom and collaborated with students to leverage the expertise of all members toward individual and collective success. With these findings in mind, teacher
educators are encouraged to incorporate an intentional focus on classroom discourse practices. Video of classroom instruction could be explored for uses of verbal language and nonverbal communication that influence student engagement and that reveal potentially unexamined assumptions about students and the teaching and learning process.

The discourse and perspectives shared by participants in this study further revealed that they each had developed a degree of critical consciousness. Their formal preparation (e.g., ESOL endorsement), participation in BDI PD, and personal life experiences all contributed to their understanding of self and others, including CLD learners. Preparation of preservice and inservice teachers for today’s diverse classrooms must ensure that all teachers are similarly supported to develop critical consciousness, including capacities for critical reflection. Opportunities to interact and collaborate with CLD students, families, and community members as part of coursework, service learning, study abroad, and practicum experiences would foster the type of perspective taking needed. Providing incentives for developing capacities in a second language would also promote firsthand knowledge of the challenges associated with second language acquisition and the benefits of bilingualism.

Summary

I opened this chapter with an introduction that summarized issues in the field that provided an impetus for the present research. I then offered a brief overview of the PDA study followed by conclusions that could be drawn from the findings. I discussed theoretical, methodological, and practical implications of the research. In this chapter I also addressed limitations of the study and provided directions for future research. Finally, I provided recommendations for K-12 schools and for teacher preparation programs. As I bring this
dissertation to a close, I encourage readers to share with others the potential of heartening discourse to transform classrooms into equitable learning spaces for all.
References


Bloome, D., Beierle, M., Grigorenko, M., & Goldman, S. (2009). Learning over time: Uses of intercontextuality, collective memories, and classroom chronotopes in the construction of


Gutiérrez, K. D. (2008, April/May/June). Developing a sociocritical literacy in the third space. *Reading Research Quarterly, 43*(2), 148–164. [https://doi.org/10.1598/RRQ.43.2.3](https://doi.org/10.1598/RRQ.43.2.3)


New York University Steinhardt. (2018). 1 in 4 students is an English language learner: Are we leaving them behind? Author, Counseling@NYU. https://counseling.steinhardt.nyu.edu/blog/english-language-learners/


Prasad, P. V., & Kalinec-Craig, C. (2021). Creating a democratic mathematics classroom: The interplay of the rights and responsibilities of the learner. *Democracy and Education, 29*(1), 2. [https://democracyeducationjournal.org/home/vol29/iss1/2](https://democracyeducationjournal.org/home/vol29/iss1/2)


Appendix A - Inventory of Situationally and Culturally Responsive Teaching (ISCRT)

<table>
<thead>
<tr>
<th>State</th>
<th>Teacher Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>District</th>
<th>Grade Level(s)</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Content Area(s)</th>
<th>Start:</th>
<th>End:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of ELL Students</th>
<th>Total Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Classroom Environment / Setup

- Rows w/ individual desks
- Groups w/ 3 to 5 desks
- Pairs w/ 2 desks
- Other

### ELL Language Proficiency

<table>
<thead>
<tr>
<th>ELL Language Proficiency</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td></td>
</tr>
<tr>
<td>Fluent</td>
<td></td>
</tr>
</tbody>
</table>

### Lesson Overview

- Lesson Topic:
- Lesson Summary:

### Strategy Implemented

- Mini Novel
- Pic-Tac-Tell
- Picture This
- Pictures and Words
- Relevance Scale
- Story Bag
- Three Facts and an Opinion
- Thumb Challenge
- Tri-Fold
- U-C-ME
- Vocabulary Quilt
- Word Drop
- Other:

### Opening / Work Time / Closing

(Continued on the next 5 pages)
### I. Joint Productive Activity

<table>
<thead>
<tr>
<th>Not Observed</th>
<th>0</th>
<th>Emerging</th>
<th>1</th>
<th>Developing</th>
<th>2</th>
<th>Enacting</th>
<th>3</th>
<th>Integrating</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The teacher:</strong></td>
<td></td>
<td><strong>The teacher:</strong></td>
<td></td>
<td><strong>The teacher:</strong></td>
<td></td>
<td><strong>The teacher:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LE</td>
<td>A. No evidence of a respectful learning environment</td>
<td>A. Creates an environment that respects students as individual learners</td>
<td>A. Creates a culturally and linguistically respectful learning environment</td>
<td>A. Creates a low-risk learning environment that values diverse perspectives</td>
<td>A. Orchestrates conditions and situations to ensure that students collaborate as equal members in a low-risk learning community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC</td>
<td>B. No collaboration between teacher and students</td>
<td>B. Collaborates with students, but no evidence of a joint product</td>
<td>B. Collaborates with whole class to create a joint product, or students collaborate on a joint product in pairs or small groups</td>
<td>B. Collaboratively guides small groups of students, especially those who need higher levels of support, to create joint products</td>
<td>B. Collaborates with students to create joint products that integrate language and content standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPSI</td>
<td>C. Students work independently of one another</td>
<td>C. Provides minimal opportunities for student interaction</td>
<td>C. Provides occasional structured opportunities for student interaction</td>
<td>C. Provides frequent structured opportunities for purposeful student interaction</td>
<td>C. Provides consistent structured opportunities for purposeful student interaction that promotes development of the CLD student biography</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGD</td>
<td>D. Pairs or groups students based on random grouping or student self-selection</td>
<td>D. Pairs or groups students based on one dimension of the CLD student biography</td>
<td>D. Pairs or groups students based on two or three dimensions of the CLD student biography as appropriate for the task/activity</td>
<td>D. Pairs or groups students based on all four dimensions of the CLD student biography as appropriate for the task/activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>E. No connections between the activity and the lesson</td>
<td>E. Makes minimal connections between the strategy/activity and the lesson</td>
<td>E. Makes occasional relevant connections between the strategy/activity and the lesson</td>
<td>E. Frequently uses insights from the strategy/activity to make connections, affirm learning, or modify instruction as needed</td>
<td>E. Consistently uses insights from the strategy/activity to make connections, affirm learning, and modify instruction as needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

**LE = Learning Environment**  **TC = Teacher Collaboration**  **TPSI = Total Group, Partner, Small Group, Individual**  **PGD = Partner/Grouping Determination**  **AC = Activity Connections**

Adapted from Doherty et al. (2002).
## II. Language & Literacy Development

<table>
<thead>
<tr>
<th>Not Observed</th>
<th>0</th>
<th>Emerging</th>
<th>1</th>
<th>Developing</th>
<th>2</th>
<th>Enacting</th>
<th>3</th>
<th>Integrating</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The teacher provides:</strong></td>
<td></td>
<td><strong>The teacher provides:</strong></td>
<td></td>
<td><strong>The teacher provides:</strong></td>
<td></td>
<td><strong>The teacher provides:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LSRW</strong></td>
<td>A. Instruction is dominated by teacher talk and students are passive listeners</td>
<td>A. Listening (L), speaking (S), reading (R), &amp; writing (W) activities with minimal opportunities for students’ academic language development</td>
<td>A. L, S, R, &amp; W activities with occasional opportunities for students’ academic language development</td>
<td>A. Frequent opportunities for student expression and academic language development in activities that integrate L, S, R, &amp; W</td>
<td>A. Consistent opportunities for student expression and academic language development in higher-order thinking activities that integrate L, S, R, &amp; W</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QRM</strong></td>
<td>B. No use of questioning (Q), rephrasing (R), or modeling (M) to assist language and literacy development</td>
<td>B. Minimal use of Q, R, or M to assist language and literacy development</td>
<td>B. Occasional use of Q, R, or M to assist language and literacy development</td>
<td>B. Frequent use of purposeful Q, R, and M to assist academic language and literacy development</td>
<td>B. Consistent use of purposeful Q, R, and M to assist academic language and literacy development and to build students’ capacities to pose questions about their own thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>L1</strong></td>
<td>C. No evidence of native language in environment or instruction</td>
<td>C. Minimal evidence of native language in environment and/or instruction</td>
<td>C. Occasional opportunities for students to use their native language during the lesson</td>
<td>C. Frequent, explicit, purposeful opportunities for students to use their native language during the lesson in ways that support academic learning</td>
<td>C. Consistent, systematic opportunities for students to use their native language during the lesson in ways that support academic language and literacy development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LBK</strong></td>
<td>D. No references to students’ prior knowledge and background experiences related to language and literacy development*</td>
<td>D. Minimal references to prior knowledge and background experiences related to language and literacy development*</td>
<td>D. Occasional references to prior knowledge and background experiences related to language and literacy development*</td>
<td>D. Frequent references to prior knowledge and background experiences related to academic language and literacy development*</td>
<td>D. Consistent use of students’ culture-bound ways of comprehending, communicating, and expressing themselves as a springboard for academic language and literacy development*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

*PA = Phonemic Awareness; P = Phonics; V = Vocabulary; F = Fluency; C = Comprehension.

---

**LSRW =** Listening, Speaking, Reading, Writing  **QRM =** Questioning, Rephrasing, Modeling  **L1 =** Native Language  **LBK =** Background Knowledge of Language/Literacy

Adapted from Doherty et al. (2002).
### III. Contextualization

<table>
<thead>
<tr>
<th>Not Observed</th>
<th>0</th>
<th>Emerging</th>
<th>1</th>
<th>Developing</th>
<th>2</th>
<th>Enacting</th>
<th>3</th>
<th>Integrating</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher:</td>
<td></td>
<td>The teacher:</td>
<td></td>
<td>The teacher:</td>
<td></td>
<td>The teacher:</td>
<td></td>
<td>The teacher:</td>
<td></td>
</tr>
<tr>
<td><strong>BK3</strong></td>
<td>A. No preassessment of students' academic knowledge about the topic</td>
<td>A. Conducts preassessment of students' funds of knowledge, prior knowledge, and academic knowledge about the topic or key content vocabulary</td>
<td>A. Conducts preassessment that provides all students the opportunity to share/document their funds of knowledge, prior knowledge, and academic knowledge about the topic or key content vocabulary</td>
<td>A. Conducts preassessment that provides all students the opportunity to share/document their funds of knowledge, prior knowledge, and academic knowledge about the topic and key content vocabulary, documents students' background knowledge for use throughout the lesson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A/CL</strong></td>
<td>B. Focus is solely on content delivery</td>
<td>B. Provides minimal opportunities for students to share with peers content-related connections to their background knowledge</td>
<td>B. Provides occasional opportunities for students to share with peers content-related connections to their background knowledge</td>
<td>B. Provides frequent opportunities for students to share/document their content-related connections to their background knowledge and purposefully listens/observes as students share/document</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BIO**

| **BIO** | C. New information is presented in an abstract, disconnected manner | C. Makes minimal connections between students' sociocultural, linguistic, cognitive, and academic dimensions and the new academic concepts | C. Makes occasional connections between students' sociocultural, linguistic, cognitive, and academic dimensions and the new academic concepts | C. Makes frequent and purposeful connections between students' individual biographies, including what was learned about their knowledge and experiences from home, community, and school, and the new academic concepts |

**Notes:**

BK3 = Funds of Knowledge (family), Prior Knowledge (community), Academic Knowledge (school)  
A/CL = Assets/Community of Learners  
BIO = CLD Biography Connections

Adapted from Doherty et al. (2002)
### IV. Challenging Activities

<table>
<thead>
<tr>
<th>Not Observed</th>
<th>Emerging 0</th>
<th>Developing 1</th>
<th>Enacting 2</th>
<th>Integrating 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACOM</strong></td>
<td>A. No accommodations for linguistic or academic levels</td>
<td>A. Provides minimal accommodations based on students' linguistic and academic levels</td>
<td>A. Provides occasional accommodations based on students' linguistic and academic levels</td>
<td>A. Provides consistent, systematic accommodations based on students' linguistic and academic levels that build upon culture-bound patterns of knowing, learning, and applying</td>
</tr>
<tr>
<td><strong>CO/LO</strong></td>
<td>B. Makes no reference to lesson objectives</td>
<td>B. Includes verbally stated or posted lesson objectives that reflect content standards</td>
<td>B. Includes content and language objectives that (1) are verbally stated and posted, (2) reflect content and language standards, and (3) are revisited during the lesson</td>
<td>B. Includes content and language objectives that (1) are verbally stated and posted, (2) reflect content and language standards, and (3) are interwoven throughout the lesson</td>
</tr>
<tr>
<td><strong>S/E</strong></td>
<td>C. Strategies/activities are not aligned to standards and do not reflect expectations</td>
<td>C. Includes strategies/activities that are aligned to standards and that reflect vague expectations</td>
<td>C. Includes challenging strategies/activities that are aligned to standards and that reflect clear expectations</td>
<td>C. Includes challenging strategies/activities that reflect skillful integration of multiple standards, clear expectations, and higher-order thinking skills</td>
</tr>
<tr>
<td><strong>AF</strong></td>
<td>D. Does not consider students' states of mind/ affective filter</td>
<td>D. Minimally attends to students' states of mind/affective filter</td>
<td>D. Occasionally monitors students' states of mind/affective filter and adjusts instruction accordingly</td>
<td>D. Consistently monitors the states of mind/affective filter of individual students and of the whole group and adjusts instructional conditions and situations accordingly</td>
</tr>
<tr>
<td><strong>FB</strong></td>
<td>E. Provides no feedback on student performance</td>
<td>E. Provides minimal feedback on student performance</td>
<td>E. Provides occasional feedback on student performance to confirm/disconfirm learning</td>
<td>E. Uses systematic formative assessment to provide consistent feedback on student performance to confirm/disconfirm learning and to advance student learning</td>
</tr>
</tbody>
</table>

**Notes:**

- ACOM = Accommodations
- CO/LO = Content Objectives & Language Objectives
- S/E = Standards/Expectations
- AF = Affective Filter
- FB = Feedback (formative assessment)

Adapted from Doherty et al. (2002).
### Instructional Conversation Continued

<table>
<thead>
<tr>
<th>Not Observed</th>
<th>0</th>
<th>Emerging</th>
<th>1</th>
<th>Developing</th>
<th>2</th>
<th>Enacting</th>
<th>3</th>
<th>Integrating</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ESTK</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>With individuals and small groups of students, the teacher:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>With individuals and small groups of students, the teacher:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>A. Lecture predominates</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>A. Elicits student talk with questioning, listening, and rephrasing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>KTU</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>B. Teacher responds in ways that validate students</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>B. Responds in ways that promote higher-order thinking and individual connections from the known to the unknown</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>C. Teacher conversation is not on topic</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>C. Uses BICS and/or CALP to discuss the content/topic; provides minimal opportunities for academic talk among students</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BICS/CALP</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>D. Incorporates no revoicing of students’ learning</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>D. Includes minimal revoicing of learning, limited to repeating students’ words</strong></td>
<td></td>
</tr>
<tr>
<td><strong>REV</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>E. Does not invite students to articulate their views/judgments/processes</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>E. Provides minimal opportunities for students to articulate their views/judgments/processes</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SAV</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>F. Does not invite students to articulate their views/judgments/processes</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>F. Provides minimal opportunities for students to articulate their views/judgments/processes and provide rationales</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

<table>
<thead>
<tr>
<th>ESTK = Eliciting Student Talk</th>
<th>KTU = Known to Unknown</th>
<th>BICS/CALP = Basic Interpersonal Communication Skills/Cognitive Academic Language Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV = Revoicing</td>
<td>SAV = Students Articulate Views</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Doherty et al. (2002).
Appendix B - Informed Consent Form

Institutional Review Board (IRB)

Informed Consent Form

comply@k-state.edu | 785-532-3224

PROJECT TITLE:
Teacher use of instructional conversations to create culturally responsive/sustaining classroom ecologies

PROJECT APPROVAL DATE: 1/31/2022
PROJECT EXPIRATION DATE: 1/30/2025
LENGTH OF STUDY: 5 months

PRINCIPAL INVESTIGATOR:
Dr. Socorro Herrera

CO-INVESTIGATOR(S):
Melissa Holmes

CONTACT DETAILS FOR PROBLEMS/QUESTIONS:
Email Melissa Holmes or Dr. Socorro Herrera:
melissa@k-state.edu; sococo@k-state.edu

IRB CHAIR CONTACT INFORMATION:
Should you have questions or wish to discuss any aspect of the research with an official of the university or the IRB, you may contact:
- Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224; or
- Cheryl Dye, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

PROJECT SPONSOR:
Kansas State University

PURPOSE OF THE RESEARCH:
The purpose of this doctoral research study is to explore interactions between teachers and students in culturally and linguistically diverse grade-level classrooms. The researcher will investigate ways elementary teachers implement instruction that is responsive to students’ cultures, languages, ways of knowing, and academic backgrounds. In particular, the researcher will investigate how teachers use instructional conversations to invite and nurture student willingness to share about and use their cultures and languages to support their learning.
PROCEDURES OR METHODS TO BE USED:
In this study, the researcher will analyze archived classroom video and documents. The researcher will also collect and analyze data from a teacher profile questionnaire and a two-part, Zoom-facilitated interview with individual teachers. The interview will be recorded, with only the audio file retained.

RISKS OR DISCOMFORTS ANTICIPATED:
There are no known risks associated with this research. All data will be securely managed and stored using pseudonyms.

BENEFITS ANTICIPATED:
You will be provided an opportunity to reflect upon your own instructional practices. Publications resulting from this research will inform the field (e.g., grade-level teachers, ESL teachers, teacher preparation program faculty) of ways teachers can use instructional conversations to provide learners with instruction that is responsive to their cultures and languages.

EXTENT OF CONFIDENTIALITY:
To protect your identity, a pseudonym will be used. You may select your pseudonym, or one will be created for you. Only the pseudonym will be used for data analysis, data reporting, and publication purposes. After your individual interview is fully transcribed, the video recording of the interview will be destroyed and only the audio file will be retained. All study data will be destroyed after seven years.

The information or biospecimens that will be collected as part of this research will not be shared with any other investigators.

IS COMPENSATION OR MEDICAL TREATMENT AVAILABLE IF INJURY OCCURS?
☐ Yes  ☒ No

Terms of participation: I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time, without explanation, penalty, or loss of benefits to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.
Appendix C - Teacher Profile Questionnaire

Teacher Name: ________________________________________________

School Name: _________________________________________________

Current Grade Level: ____________________________________

**Directions:** For each of the following items, please highlight the response option that best represents your answer.

1. Ethnicity
   - European (Anglo)-American
   - African-American
   - Asian-American
   - Hispanic-American
   - Other _________________________________ (please specify)

2. Level of Education
   - BS/BA or other 4-year College Degree
   - MS/MA or other Masters Degree
   - PhD/EdD or other Terminal Degree
   - Other _________________________________ (please specify)

3. Endorsements Held (place highlight all that apply)
   - Reading
   - Multicultural– MC/CLAD/ESOL
   - Special Education
   - Other _________________________________ (please specify)
   - None

4. In what state were you born?
   - Kansas
   - Colorado
   - Iowa
   - Missouri
   - Nebraska
   - Oklahoma
   - Other _________________________________ (please specify)

5. How long did you reside in the state you were born?
   - 0-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 21-25 years
   - 26-30 years
   - 31-35 years
   - 36 or more years
6. In how many U.S. states have you lived?
   - 1 state
   - 2 states
   - 3 states
   - 4 states
   - 5 or more states

7. Do you reside within 100 miles of the place you grew up?
   - Yes
   - No

**Directions**: Please provide your written response to each question.

8. How many years have you worked in the classroom?

9. How many years have you taught in the school in which you are currently teaching?

10. How many years have you taught in your current position (as identified at the beginning of this questionnaire)?

11. Please list all grade levels/content areas you have taught:

12. If you speak one or more languages other than English, please list them:

13. How many years of your teaching career have you had identified English Language Learners in your classroom?

14. Please describe how prepared you feel to address the needs of culturally and linguistically diverse (CLD) students within your own teaching and learning.
15. Please share any information about yourself or your teaching experience that has prepared you to address the needs of your CLD students.

Thank you for taking time to complete this profile questionnaire.

The information you have shared is greatly appreciated!

Copyright © 2022 Socorro Herrera et al., CIMA

Kansas State University College of Education
Appendix D - Classroom Community Profile

**Holistic Class Profile: Next Steps to Further Learning**

**Community Strengths:** Sociocultural, Linguistic, Academic, Cognitive

- 
- 
- 
- 
- 
- 

**Goals:** What conditions can be created to maximize community assets?

- 
- 
- 
- 
- 
- 

**Community Challenges:** Curricular, Logistic, Student, Family

- 
- 
- 
- 
- 
- 

**Action Plan Timeline:** How long?

- 
- 
- 
- 
- 
- 

---

**Classroom Community**

<table>
<thead>
<tr>
<th>Teacher Name</th>
<th>Grade Level</th>
<th>Content Area</th>
<th>School</th>
<th>District</th>
<th>State</th>
<th>3) # of SPED</th>
<th>4) # of English Language Learners</th>
<th>5) # of Other (Homeless, Foster Homes, etc.)</th>
<th>Total At-Risk Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Comments:**
## Class Roster

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>ELL Yes / No</th>
<th>SPED Yes / No</th>
<th>Homeless Yes / No</th>
<th>Academic Status Below / Grade Level / Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Comments:**
Please provide a brief description of some of your High, Low, Mid students or SPED, ELL, Gifted.

Below is an example of what one teacher provided:

<table>
<thead>
<tr>
<th>Student</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH, female, African American, 8 year old</td>
<td>GH entered my classroom reading slightly below grade level. She was always well behaved and quickly showed leadership skills in the classroom. I knew that she was interested in cheerleading outside of school, so I would often chose GH to be a group facilitator. She would help others by keeping them on track and focused. GH made moderate growth in her reading during the school year. BDI helped her to develop her leadership and communication skills in the classroom.</td>
</tr>
<tr>
<td>YG, male, Hispanic, 9 year old</td>
<td>YG entered my classroom very low. I noticed right away that he was very reserved and shy. He would keep to himself and did not immediately participate in classroom discussions or volunteer to speak in class. This seemed to be further than a language barrier, because other students would speak to YG in Spanish, and he still had the delayed response time. After further observation and testing, it was determined that YG had a learning disability and qualified for special education services. As mentioned, YG entered my room with low language skills, seemingly unable to retain necessary vocabulary, and at a very low reading level. Knowing all of this, I still encouraged YG to participate in class and encouraged him to draw out pictures or make up spelling if needed when using BDI tools. By the end of the year, he was able to successfully fill out his own DOTS chart, start on a vocabulary quilt on his own, and take notes in class on his own. He went from not being able to recall or read basic sight words, to using a DOTS chart to write a complete sentence that was grammatically correct and error free. I also noticed that YG began opening up as the year went on. During class discussions, he would offer his input and would even raise his hand to participate in class. The other students in class were always supportive of YG and would encourage him to participate and share in class. YG showed some growth in his reading according to data. However, I know that BDI helped YG become a more confident learner.</td>
</tr>
</tbody>
</table>

THANK YOU!
Appendix E - Interview Protocol

Interview Protocol

Questions to Support Understanding of the Classroom Community

Profile of Teacher

You provided many details about your positionality (identities/lived experiences related to ethnicity, language, where you grew or have lived, professional skills, etc.) in your original teacher profile and through the updated teacher profile questionnaire.

- Based on these, I would like to ask a few follow-up questions to better understand your background. *(Ask teacher-specific questions)*
- Is there any additional information you would like to share about yourself or your experiences?

Profile of Learners

Archived classroom profile information provided some context on the learners in your classroom community.

- I would like to ask a few questions to better understand this group of learners. *(Ask classroom-specific questions)*
- What additional information would you like to share about this class? (We can also come back to this question after watching the video excerpts.)
Part 1: Exploring Episodes of Classroom Teaching

Video Elicitation

Next, we will watch selected video segments from your classroom teaching. Each of the episodes is under 10 minutes in length. I would like to hear your perspectives on moments that stand out to you. For example:

- What moments best illustrate how you encourage students to make and share connections to their cultures, languages, and lived experiences?
- How do your observations of students and what they produce influence the way you engage in conversation?
- How do you use instructional conversations to build upon students’ assets?
- What aspects of the instructional conversations most influence the classroom environment/ ecology?
- How does your positionality influence the way you engage with learners during instructional conversations?

I encourage you to jot down notes as you watch the video. After each video, we will have an opportunity to discuss our perspectives on the teaching episode.
Part 2: Exploring Institutional Factors

Semi-structured Interview Questions

In what ways does your current instruction look similar to/different from the episodes of teaching we just saw? What factors influence any differences that exist between your past and current teaching? What are non-negotiables for you with regard to your teaching?

Does your school context (e.g., curriculum, initiatives) support or hinder your efforts to engage with learners in biography-driven ways? If so, how? Has the impact of the school context on your instruction changed over time?

Have instructional leaders and school administrators influenced your growth as a BDI teacher? If so, in what ways?

Do other colleagues influence how you approach instruction? If so, how?

Have district/state expectations for teachers had an impact on your instruction? If so, do such expectations positively or negatively affect your ability teach in biography-driven ways?

In what ways have national conversations surrounding race, culture, language, and education influenced your ability or commitment to teach in culturally and linguistically responsive ways?

What are the top three things that would support your ability to be a BDI teacher in the future?
Appendix F - Questions That Can Be Asked of a Text

Questions That Can Be Asked of a Text

A. Vocabulary

1. What experiential values do words have?
   What classification schemes are drawn upon?
   Are there words which are ideologically contested?
   Is there rewording or overwording?
   What ideologically significant meaning relations (synonymy, hyponymy, antonymy) are there between words?

2. What relational values do words have?
   Are there euphemistic expressions?
   Are there markedly formal or informal words?

3. What expressive values do words have?

4. What metaphors are used?

B. Grammar

5. What experiential values do grammatical features have?
   What types of process and participant predominate?
   Is agency unclear?
   Are processes what they seem?
   Are nominalizations used?
   Are sentences active or passive?
   Are sentences positive or negative?

6. What relational values do grammatical features have?
   What modes (declarative, grammatical question, imperative) are used?
   Are there important features of relational modality?
   Are the pronouns we and you used, and if so, how?

7. What expressive values do grammatical features have?
   Are there important features of expressive modality?

8. How are (simple) sentences linked together?
   What logical connectors are used?
   Are complex sentences characterized by coordination or subordination?
   What means are used for referring inside and outside the text?

C. Textual structures

9. What interactional conventions are used?
   Are there ways in which one participant controls the turns of others?

10. What larger-scale structures does the text have?

Source: Fairclough (1989), pp. 110-111
Appendix G - Transcription Conventions

Transcription Conventions

students  underlined word or portion of word indicates stress or emphasis

Teacher: Now [what I was saying  overlapping speech
Student:  [You gotta

((noise of flipchart))  transcriber’s comment

?  rising intonation often associated with asking a question

“clipboards right there”  quieter than normal

CLASS  louder than normal

(shortfall here)  best guess

(?how it is)  more tentative guess

[ . . . ]  data omitted

logging  lengthening of vowel

*hello*  said laughing

~I’m going to~  stylized speech (e.g., role playing what student might say)

( xxx)  unclear speech (roughly one x per syllable)

/  noticeable pause

//  longer pause

Pseudonyms were provided to students who were identifiable because the teacher spoke their name. Pseudonyms were also used for students seen on camera who were engaged in more than one exchange; such usage supported the linking of multiple responses to the same learner. Pseudonyms maintained the students’ gender. Those learners not identifiable because they were off camera were labeled “Student” followed by a number to indicate different students relative to a particular exchange. Students speaking in unison were labeled “Students.” If students referenced the teacher by name, a pseudonym for the teacher was used.
Episode 1
[start 1:58]
1. Teacher: The first thing a good / writer / or researcher is going to do, is going to be brainstorming ((touches hands to head)) / thinking of things that they might want to write about. Have we done this before?
2. Student 1: Yeah. ((teacher nods))
4. Teacher Have we brainstormed ideas about what to right about before?
5. Student: Yeah
6. Teacher: We're going to be kind of doing the same, but this time, our brainstorming ((touches hands to head)) has a purpose, and our purpose is performances, or types of performances. Do we have different types of performances on our DOTS chart? ((picks up a nearby student’s DOTS chart and indicates entire chart))
7. Student: Yes.
8. Students: Yes.
9. Teacher: Okay, can we use those words to brainstorm on our whiteboard and marker ((places hand down on a student’s whiteboard, signaling transfer of words))?  
10. Students: Yes.
11. Teacher: Okay. ((returns student’s DOTS chart)) So let's do a couple together. Look at your DOTS chart. ((sets class DOTS chart on the projector and displays)) Raise your hand and give me a word on your DOTS chart that is a type of performance. ((student raises her hand)) Rose.
12. Rose: Drama. ((writes word on class DOTS chart))
13. Teacher: Drama. And what does drama mean? What does that mean? If I have a drama, what kind of performance am I doing?
14. Student: (x)
15. Teacher: A what?
16. Student: It could be funny like [ 
17. Teacher: It could be funny, but what am I doing? Am I dancing? Is that a drama?
19. Teacher: What is a drama?
20. ESOL Teacher: What kind of show might it be?
21. Teacher: Like [ 
22. Victor: [A radio performance? ((extends his arm))]
23. ESOL Teacher: It could be. [ 
24. Teacher: [Could be. [ 
25. ESOL Teacher: Could be (x) on the radio.
26. Teacher: Could be. But if I'm thinking of a performance on a live, or on a stage in front of a ((extends both arms to demonstrate a large gathering and pauses for students to join in))
27. Students: Live audience.
28. Teacher: Live audience, the drama's going to be like a ((pauses for students to join in))
29. Student: Live play. ((writes on class chart))
30. Teacher: Like a what?
32. Teacher: Play. Okay. Let's get another word from our DOTS chart. Martha.
33. Martha: (xx)
34. Teacher: Concert. ((writes on class chart)) What *kind* of concert might it be, Martha?
35. Martha: Singing.
36. Teacher: Singing concert. Could you also be playing ((pauses for students to join in))
38. Teacher: Instruments. So we might have an instrument at a concert. ((writes on class chart))
39. ESOL Teacher: And if she's writing these ideas, you can write them on yours, also. And that way when you're ready, you will have *more* ideas.
40. ((Students write on their dry erase boards. Teacher circulates around the room, observing what students write. [17 seconds]))
41. Teacher: °Good job, Joe.° ((teacher nods while speaking to student)) ((comment to Joe)) ((teacher touches Joe lightly on the shoulder, shakes head no, and continues to walk on))
42. Teacher: Looking on the DOTS chart, there's one other one that I'm that I think is really big that, um, our picture ((indicates gestures toward wall of classroom with her hand)) displays—José Limón ((uses hands to indicate big)) and our main story.:
43. Student 1: Performance?
44. Teacher: ((extends hand to indicate a student should share her idea))
45. Student 2: Um, ballet?
46. Teacher: Ballet. ((writes on class chart)) But what is a ballet?
48. Student: [Dance.
49. Teacher: A type of ((pauses to allow student to join in))
50. Students: Dance.
51. Teacher: Is ballet the *only* type of dance there is?
52. Students: No.
53. Teacher: What other kind of dancing is there?
54. ((students murmur ideas, including “the flamenco” until the teacher points to one student))
55. Student: The flamenco.
56. Teacher: The flamenco. ((writes on class chart)) We read about that one, the flamenco. That was a popular type of dance. / What other kind of dancing could you do?
57. Student 1: Hmm.
58. Manuel: Danza.
59. Teacher: ((points to Manuel)) Danza. Okay, um, correct me if I'm wrong here, Manuel. Danza? Like that? ((speaking to Manuel))
60. Students: No, “z-a.”
61. Teacher: ((corrects the spelling of the word)) Danza. Okay. Danza might be a type of dance that you want to learn more about.
63. Teacher: We have flamenco right here. ((points to the word already recorded on the projected class chart)). Haley? ((points to student))

64. Haley: Salsa.

65. Teacher: Salsa dancing ((animatedly nods; turns to write word on class chart)). / Anyone ever ((acts out tap-dancing))? 

66. Students: Tap-dancing.

67. Teacher: Oh, tap-dancing ((writes word on class chart)). Mariela, you have another idea?

68. Mariela: The tango.

69. Teacher: The tango. ((writes word on class chart)) /

70. Student: (x) got a lot more than (x) does.

71. Teacher: ((laughs and responds to student)) Dance has a lot of different types of dancing, doesn’t it? // Any other types of dancing that we can / think of?

72. Student 1: (xxxxx)

73. Student 2: I’m pretty sure [that’s the same as tap.

74. Teacher: [Say it again.

75. Teacher: What?

76. Student: It’s the same thing as (tap) (xx).

77. Teacher: Sapatiado? ((tries to repeat what Student 1 said))

78. Raúl: ((chuckles))

79. Student 2: It’s the same thing as [tap

80. Teacher: [Close?

81. Teacher: Same as tap-dancing, so that would be the Spanish word then there for tap-dancing. Okay. Aaron?

82. Aaron: Freestyle.

83. Teacher: ((gestures with hand to ear that she could not hear))

84. ESOL Teacher: Freestyle

85. Teacher: Freestyle, yes! ((writes on class chart)) There is definitely freestyle. //

86. Student: Freestyle (xxxx)

87. Teacher: Bailey?

88. Bailey: (line dancing)

89. Teacher: Line dancing, yes. ((writes on class chart)) We have some line dancing. Where people get in a line and do a dance. ((nods head affirmatively))

90. Lily: (Breakdance)

91. Teacher: Huh?

92. Lily: Breakdance.

93. Teacher: *Breakdance*. Yeah! That’s a good one. ((writes on class chart)) So do you see how we’re just coming up with all of these different ideas ((gestures rolling in the air)) of possibilities ((gestures upward with shoulders raised)) of something I might want to learn more about. // So now what I want you to do, is I want you to look at the list that we ha:ve. We have a play ((points to word on class chart)), a concert ((points to word)) of either singing or instruments, or we have a lot of different kinds of dancing ((points in a circle to encompass lots of words on the class chart)), and I would maybe lead ((gestures with both hands to one side, as in leading)) you more towards picking a type of dance. I think that would be easy ((nods affirmatively)) to research and easy to get some information on.
However, I do think that some of you could do some good research with the others. But right now I want you to pick two ((holds up two fingers)). And if you have another idea you can add it to your board that we don't have ((points to projected class chart)). But I want you to pick two things you think, ~Ooh, I might be interested / in learning more about what a, what flamenco is. Or I know stuff about flamenco and I want to know more.~ Okay, or maybe you want to learn about the certain Danza ((points to and circles the word on the projected class chart)). I want you to pick two ((hold up two fingers)) and I want you to circle ((gestures circling)) them.
[end 8:26]
Appendix I - Episode 2 Transcription

Episode 2
[start 17:01]
((Raúl is off task messing with his pencil and eraser shavings. The teacher, who is circulating among the class as students work, approaches from behind and places her hands on Raúl’s shoulders to reassure and refocus him.))

1. Teacher: Okay. So, get your DOTS chart here. ((reaches around Raúl to pull out his DOTS chart from under another piece of paper; places it in front of him; crouches down beside him, and begins pointing to his DOTS chart with a pencil to visually indicate what she is saying)) And what I want you to do is I want you to look, and I want you to think. So what Ali is doing is he’s going to here ((points to Raúl’s DOTS chart)) and when he reads the word “abilities” he goes ((points to Raúl’s U-C-ME)) ~Oh ((makes eye contact with Diego, another student in the small group)), I bet people who do ((returns eye contact to Raúl)) the flamenco dance have to have ((pauses for Raúl to fill in the blank))


3. Susana: (xx) (costume)

4. Teacher: ((turns to look at and point to Susana)) Oh, maybe even a costume. ((returns gaze to Raúl)) Right? ((makes eye contact with Diego, then shifts gaze back to Susana)) So we’re gonna be looking at the words ((Susana nods)) we have here and then ask ((makes eye contact with Diego and then shifts gaze back to Susana)) ourselves, ~Ooh, ((nodding)) does that word relate to my type of dance?~ ((turns attention back to Raúl)) So, does “abilities” ((points to word on his DOTS chart)) relate to yours ((points to his U-C-ME))? 

5. Raúl: ((begins to write the word on his U-C-ME chart))

6. Teacher: You can add it. ((shifts gaze to Susana)) I agree with Rose ((points to Rose)) that “costumes” does. ((observes what Diego is doing and nudges his DOTS chart closer toward him)) So, same thing, Diego. Go through and look. Are they going to have an audience? ((question directed to entire small group)) ((Nods encouragingly to Susana))

7. Susana: (xxx) outside (x)

8. Teacher: ((responding to Susana)) You could, right? You don’t have to, but you’re just looking 

9. Diego: (xxx) (abilities)

10. Teacher: Do you have to have abilities to breakdance? ((nods while asking the question))

11. Diego: (Yeah)

12. Teacher: Yeah. Ms. Nelson can’t go ((gestures generally away from the group)) breakdance ((looks at Susana)), that’s for sure. ((smiles big))


14. Teacher: ((looks first to Raúl and then to Diego)) *You either* ((gets up to circulate to other groups))

15. Teacher: ((teacher is crouched beside Kendra, who sits at her desk in a small group with two other students)) What about “abilities”? ((points to the word on Kendra’s DOTS chart)) Do people who breakdance ((points to Kendra’s U-C-ME) have to have abilities?

16. Kendra: ((nods and smiles))
17. Teacher: So you see how it, it can also be looking at words here ((pointing to the DOTS chart)). I see, ooh! Do they have to have a, um,/ ((shifts upwards to look more closely at the writing on Kendra’s DOTS chart)) choreographer? I don’t know. Do they have to put in effort?

18. Kendra: ((nods and smiles; writes the word on her U-C-ME))

19. Teacher: Okay, can you see how you can go through and look ((Kendra begins nodding)) for your words and see how they match up? ((teacher gets up to continue circulating))

20. Teacher: ((at the front of the classroom claps her hands in a rhythm to get the students’ attention and bring them back together))

21. Students: ((stop working and repeat the clapping rhythm))

22. Teacher: All right. You have already identified what / you / know. Now is the time / for you to be thinking about / what you / want to ((pauses for students to join in))

23. Students: Know [

24. Teacher: Learn about the topic. What do you want to know about the topic? So, I maybe know that tap-dancing, um, I maybe you know that it has special shoes. I, I saw a lot of great words from your DOTS chart guys ((looks around at the class)). “Ability.” ((holds up one finger)) Do all dancers have to have ability?


26. Teacher: Do they have to put in effort? ((holds up two fingers))

27. Students: Yeah.

28. Teacher: Skill? ((holds up three fingers))

29. Students: Yeah.

30. Teacher: All those great words you added. That’s excellent. But now I want you thinking deeper. ((extends both hands to make a big circle, indicating “deeper”)) What do I want to know about ballet? Well, a good question might be ((puts hand to chin to gesture pondering)) How did [ 

31. Student: Did it start?

32. Teacher: How did ballet ((pauses for students to join in))

33. Students: Start?

34. Teacher: Start? Or begin?

[end 19:36]
Episode 3
[start: 21:48]
1. Teacher: All right. Again, ((teacher picks up her clipboard)) a lot of you have some really excellent words. You made some great connections. Am I ((puts her hand on her chest)) going to have every single word that you have?
2. Students: No.
3. Teacher: Does that mean your words are wrong?
4. Students: No. ((teacher shakes her head))
5. Teacher: Does that mean you need to take anything off your chart?
7. Teacher: No, these are just the words that I collected from you ((gestures to the entire class)) that I thought were excellent and were going to be helpful for, uh, this week’s reading. ((walks to the projector)) So, if you don’t have a word I have, then you’re going to write it down. ((begins projecting the class DOTS chart)) But if you do have it, then you’re good to go. So, for “A” and “B”—a lot of good words for “A” and “B”. I saw a lot of you had “animal skin,” and then you connected that animal skin to “clothing.” ((points to the word on the class chart)) ‘Cause we knew: from past ((gestures)) that Native Americans used animal skin to make clothing. “Buffalo” was another great word. Ope! I’ve ((adds to chart)) left off “bones.” Someone wrote animal bones. [I thought that was excellent because we know they use a lot of things.
8. Victor: [That was me! ((raises his hand proudly)) ((teacher winks and nods at Victor to communicate that she knows he is the contributor))
9. Teacher: Good, Victor. “Beads.” We remember ((nods)) Miss Stevens talking about how she made her own beads or had to trade for beads. And then I saw the word “boats”. ((points to student who contributed the word)) Andrea had “boats,” and so then the group talked about ~Well, what was that type of boat that we talked about from our focus wall?~ ((gestures to the wall at the back of the room)) And that was a “canoe.” ((points to word on the projected DOTS chart)) So we went ahead and connected the word “boat” to a “canoe.” So this week instead of using the word “boat,” let’s use the word ((pauses for students to join in))
10. Students: Canoe. ((teacher nods))
11. Teacher: Canoe. And so then that left the word “crops.” I saw that ((gestures toward student who contributed the word)) on Rose’s. That was a great word, because Native Americans definitely contributed some crops, um, to our society. “F” a great word was “fishing.” ((nods affirmatively)) “H” “hunt” ((nods)). I saw almost all of us wrote “hunt,” or “hunting.” I like this word I got from ((points to student)) Ricardo. Um, he said “leather.” I thought that was a great word. ((nodding)) It is possible that Native Americans contributed some leather to our society.
12. Student: [Cow.
13. Teacher: And a word we kind of talked about ((gestured toward the back of the room)) back at the focus wall that I saw a lot of us use was “natural resources.” Let me zoom into that
word (enlarges the word projected). “Natural resources.” ‘Cuz we’re gonna talk about that word here. “River.” (gestures toward back of room) Again, somebody used that word from our focus wall picture. That was excellent. “Tribes.” (points to word) “trees,” and who remembers Miss Stevens singing and dancing for us? (looks around at the students—at least one raised her hand—and nods) A couple of you remember that and put that on your DOTS chart. (points to word on chart) “Wood” and “water.”

14. Student: (xxxxxxx) in there? (teacher smiles)

15. Teacher: So, now let’s talk about natural resources ‘cuz we’re gonna make some connections, and I saw some of you had already made those connections on your own. But, what are some natural resources that we have on our DOTS chart that we could connect to?

17. Teacher: Wood. Is wood a natural resource?
19. Teacher: Yeah, it comes from nature, right? (draws the connection) So I can connect “natural resource” to “wood.”
21. Teacher: [What else?]
22. Student: Water.

23. Teacher: Water. (draws the connection on the chart) Keep going:

26. Student 1: Leather.
27. Student 2: Leather.
28. Teacher: Ooh, is leather a natural resource?
29. Students: No.
30. Teacher: Can you find it in nature, or does it have to be kind of made?
31. Student: Ehh.
32. Teacher: Yeah. We won’t put that as a natural resource.
33. Student 1: Mmm.
34. Student 2: Animals?
35. Teacher: Are animals natural resources? (nods)
36. Student 3: Yes.
37. Student 4: No.
38. Teacher: Maybe.
39. Student: Crops.
40. Student: You can connect “animal skins” and “animal bones” (and to) “buffalo” (since it’s) natural resources.
41. Teacher: Buffalo. All right. Might have to find some buffalo out there in nature. What about our river? (points to the word on the chart)
42. Student: Yeah. (teacher nods)
43. Teacher: What else could we connect river to?
44. Student: Canoe.
45. Teacher: What is river?
46. Students: Water.
47. Teacher: Water. Why can I connect it to a canoe? David?
48. David: Because you use it on it, or it’s kind of like a boat, you use it on the water.
49. Teacher: You travel on a canoe on a river. Right? So you can make all kinds of connections ((gestures “more and more” using hands)), whatever connections you’d wanna make, but I’d be going, “Okay, I’m going to use the river as a natural resource.” And what else are they gonna get out of the river?
50. Student: Fish.
52. Student: Water?
53. Teacher: Water ((nods)) from a river. ((draws connection on the chart))
54. Student: I can get, connecting to (x) [ 
55. Teacher: [What about “trees,” are they a natural resource?]
56. Students: Yeah. (((teacher nods and draws connection)))
57. Students: [Yes.]
58. Teacher: What do trees give us?
59. Student: Wood.
60. Students: Wood. (((teacher draws connection)) // (((teacher smiles to someone off camera)))
61. Teacher: All right. You did an excellent job. It’s very clear that we have some background knowledge about Native Americans. Um, we’re definitely gonna grow that knowledge this week as we learn about, um, a certain Native American, Sacagawea. Um, but for right now, we’re gonna go ahead and flip it over (((teacher flips over the class DOTS chart and re-clips it to her clipboard))) and we’re gonna spend five minutes of you, um, thinking of a picture, or another word—synonym—that you can use for our vocabulary (((gestures to projected class DOTS chart))).
[end: 27:41]
Appendix K - Episode 4 Transcription

Episode 4
[start 47:11]
1. Teacher: Go back up there to the sentence with territory. Ready. Read.
2. Students: “The land was (xx) the Louisiana Territory.”
3. Teacher: Read it again. Ready. Go.
4. Students: “The new land was known as the Louisiana Territory.”
5. Teacher: So what did we say “territory” was?
6. Students: ((overlapping speech)) ((teacher points to various students as they make contributions))
7. Teacher: So is territory (xx)? ((directs her question to Hector))
9. Hector: ((shakes his head))
10. Teacher: Okay, so, what can you do? ((gestures crossing something out))
11. Hector: Cross it out. ((begins to cross out something recorded on his tool))
12. Teacher: And what should you write? (((waits for response)) Land, right?
13. Raúl: [I just draw (xx) a little hut, and then I draw, I tried to draw, um [ ((teacher leans in to focus on Raúl)]
14. Teacher: [And why did you draw that? What were you ((makes a circular motion with her hand near her head)) thinking?
15. Raúl: What I was thinking, of, like (xx) guarding a territory so []
16. Teacher: [So, like they were guarding their ((pauses for students to join in))
18. Teacher: Land, right? So that word “land” ((points to Hector’s paper)) is really what that territory or territories, like what []
19. Victor: [((xxxxxxxx) land is territories
20. Teacher: But what does, is it just any land? (((directs question to Victor; Raúl gets up and leaves small group))
21. Hector: ((shakes his head))
22. Patricia: No. ((shakes her head))
24. Teacher: The land that you ((pauses for students to join in))
25. Student 1: Specific land.
26. Students: Own.
27. Teacher: Okay, maybe you need to add that then to that box there, right? (((addressed to all students)) It’s not just any land, but it’s going to be the land that you ((pauses for students to join in))
28. Students: Own. ((Raúl rejoins group))
29. Jasmine: Land that you own ((moves to write on her tool))
30. Teacher: Or land that you own. Or certain land. // (((students all write on their tools))
31. Raúl: What I do is I looked at my picture and then I tried to (xxxx)
Teacher: [Uh huh. ((directed to Raúl))]

Raúl: And I tried to draw some (xx)

Teacher: [Uh huh.]

Raúl: So I tried to draw [like some (xxx) ((Patricia makes noises at Jasmine and smiles))]

Teacher: [((to other student)) °Shhh. You need to listen to your peers.° And so, let's ((motions with hand to bring the group together)) think about Native American territory. What used to be Native Americans’ territory?

Victor: The United States?

Teacher: The whole entire ((widens eyes and mouth; uses hands to make a circle in front of her face)) ((pauses for students to join in))

Patricia: United States. ((nods))

Teacher: United States. What started happening to their territory?

Victor: People started taking over.

Students: ((overlapping speech))

Teacher: And it started getting [ ((gestures smaller, [smaller, smaller, with hand])

Victor: [big

Patricia: [smaller, smaller ((mimics teacher gesture))

Jasmine: (xxxx)

Teacher: So, now do they have a little bit of territory? ((nods))

((students also nod; Patricia puts her hands together to illustrate a small amount))

Teacher: Yeah, but the Native Americans, their territory was this whole ((uses both hands to make a circle)) entire country.

Raúl: (xxx) started to come and then (xx)

Teacher: Well (xx) (didn’t) you mean like the English White settlers and the other people started coming out. Mexicans started from Mexico ((uses hands to illustrate upward movement)), Europeans coming from Europe ((uses hands to illustrate movement toward the center from the side)) and then we just started kind of taking over, didn’t we? ((students nod)) Taking their territories. Um, but did we know what this territory looked like?

Students: No. ((students shake their heads)

Jasmine: There's probably lots of trees.

Teacher: [So what does the President ((points to and taps text)), what is his idea here? What is the main idea? What is his idea here?]

Students: ((overlapping speech))

Jasmine: There's probably lots of trees.

Victor: It was just probably plain ((x)

Teacher: [((to group)) Why? Why would he want that?]

Students: ((overlapping speech))

Jasmine: He was there.

Teacher: ((nods)) So was (x)
63. Victor: See if there’s food. Food [Yeah. ((nods)) Absolutely.]
64. Teacher: [Yeah. ((nods)) Absolutely.]
[End 50:19]
Appendix L - Episode 5 Transcription

**Episode 5**
[start 0:35]

1. Teacher: [...] I’m going to show you what our posters are for this week. ((holds up Linking Language posters for the class to see, as they sit on the carpet)) Now, this week, our theme is going to be the arts. And our focus will be music. So thinking ((points to her head) about that and thinking about these posters ((points to the middle of the poster facing the students)), you guys are going to go through and write what it reminds you of ((points to her head)), what it makes you think about ((holds hand out, palm up)), or how ((places hand over heart)) it makes you feel. ((student who has been standing to the side by the desks comes over to join the group)) And so take a look at these two photographs that I have today. This is the first one. / ((shows picture)) And this is the other one ((shows picture)).

2. Student: And that looks like (xx).

3. Teacher: You guys will take turns writing what it makes you think about, reminds you about, or how it makes you feel. You have your Linking Language markers with you. Listen ((points to head)) carefully so you know which pa ((self-corrects)) poster you will be going to this morning first. At this poster ((holds up poster)) that looks like this I would like Harmony, Noel, and Adam.

4. Student: Mrs. Ramirez, this, this looks like a (xxx).

5. Teacher: You can write it on your poster. ((shakes head slowly)) ((Holds up one finger)) Remember, we can write or we can draw. At this poster over here ((sets poster on the carpet)), I would like Giorgio, Amanda, and Carlos. At this poster over here, I would like Gabriel, Luis, and Maricela. And at this poster over here, my two girls, and Michael, when you’re ready to join us, you can come with the girls, okay? ((gestures to where the girls are sitting)) What do you see, what does it remind you of, what does it make you think about, or how does it make you feel. ((begins to circulate among the groups)) Maricela, what are you drawing? ((approaches student and crouches down beside her))


7. Teacher: A doctor. And why are you drawing a doctor?

8. Maricela: Because doctors have this to make people, um, feel better. ((looks up at teacher))

9. Teacher: Oh, so you’ve seen that ((Maricela nods)) in a doctor’s office where they make people feel better? ((gestures toward the poster)) Okay. ((Maricela begins to write on the poster))

10. Luis: Um, doctors freak me out and making me feel (x) and I got a band-aid over that.

11. Teacher: (speaking to Luis)) So if that scares you, what can you draw on your Linking Language poster?

12. Luis: (x)

13. Teacher: Very good. ((gets up and moves away from group))

14. Luis: One time I [...] ((students work on posters))

15. Teacher: CLA:SS, CLA:SS ((said to a tune))

16. Students: Ye:s, [ye:s. ((said to the same tune))

17. Student: (((still speaking to his small group)) I’m gonna draw a baby.
18. Teacher: MARKERS UP. ((puts hand up in the air)) ((some students hold up their markers))
19. Student: Ah! My lid!
20. Teacher: All right. Listen carefully. You are going to switch to the other poster. So these two groups right here, go ahead and switch ((uses hands to indicate switching places)), and then you can get started. ((moves to another set of groups)) These two groups right here, go ahead and switch ((uses hands to indicate switching places)) and you can get started on your same poster. Remember, we are drawing or writing what we see, what it reminds us of, or how it ((places hand over heart)) makes us feel.
21. Students: ((overlapping speech))
22. Teacher: ((places hands on the shoulder of a student standing by a desk)) You are at that poster now.
23. [ . . ] ((students resettle into their groups))
24. Teacher: What you see, what it ((points to head)) reminds you of, what it makes you think about, or how it makes you feel. Go ahead.
25. Student: It has numbers on it.
26. Teacher: ((places hands on the shoulder of a student standing by a desk)) You are at that poster now.
27. Students: ((overlapping speech))
28. Teacher: Ooh, Harmony, what are you drawing? ((stoops down to see better))
29. Harmony: I drew (?colors of rainbow) cuz like running down to this
30. Teacher: You think he’s going to fall down?
31. Harmony: Yeah, cuz the, cuz the (xxx) like that.
32. Teacher: They’re way up high?
33. Harmony: (xxxxxxxx) right here.
34. Teacher: Oh, they’re bending? You think he’s falling?
35. Harmony: Yeah.
36. Teacher: Can you draw that for me or write it? And then what are you drawing? ((directed to another student in the group))
37. Student: (xx)
38. Teacher: The what?
40. Teacher: Oh, something? You don’t know what it is yet? ((rises and chuckles with a sweet tone and rises smiling from the group to circulate to another))
41. Teacher: Luis, what are you drawing? ((crouches down toward student)) The man on the bicycle?
42. Luis: No. I don’t like bikes. (Nobody) likes them.
43. Teacher: You don’t like bikes?
44. Luis: I, I ride a bikes.
45. Teacher: You know how to ride a bike?
46. Luis: Yeah. ((teacher rises and then turns to the rest of the class)) I didn’t ride a bike to school today. (xxx)
47. Teacher: [Friends, you have about 30 more seconds.}
48. Students: ((overlapping speech)) ((teacher circulates, sees Gabriel with his hand raised, and approaches))
49. Teacher: Yes, sir?
50. Gabriel: Uh, um, ((teacher bends down to come closer to the student)) Luis is gonna draw (xx) from the scary movie.
51. Teacher: Oh ((in an empathizing tone), so he’s ((points to another student in the group)) drawing what he sees on there. You can do the same thing. What connections did you make? What did you see?
52. Student: Mmm. (xxx) Bends down to look closer at the poster. (xxx)
53. Teacher: Okay, can you draw that? Awesome. ((stands to leave the group)) CLA:SS, CLA:SS ((said to a tune))
54. Students: Ye:s, ye:s. ((said to the same tune))
55. Teacher: MARKERS UP. ((raises both hands in the air)) ((gestures like she’s putting the cap on a marker)) Lids on markers. / Beautiful job. Please go back to your original poster, the poster that you started at. ((students move)) Once you get back to your original poster, take a look ((interrupts herself)) Oh, I can wait. I need your attention ((holds up hand with all five fingers up)) in five, ((begins to lower one finger each time she counts down a number; students join in)) four, three, two, one, zero. Oh, much better. Once you get back to your original poster, observe and read. Are there things that are alike that are similar? Did you guys have similar connections, similar ide:as, similar fee:lings ((puts hand over heart))? Go ahead and observe your posters ((points to a poster)) and ((raises a finger)) if you think you find something you want to link, raise your marker ((raises hand in the air)) and I will come and confer with you. (((many students raise their hands)) ((teacher leaves the spot where she was standing)) All right. Let me grab some sticky notes real quick.
56. Student ((to her group)): I want to link that.
57. Students: ((overlapping speech))
58. Student: Heart.
59. Teacher: All right, Miss Amanda. What do you think you want to link?
60. Amanda: Doctors.
61. Teacher: Doctor:rs. Can you link it and write it? Did you find something different?
62. Student: (xx)
63. Teacher: Okay, so she is going to link the heart, can you link equipment? There you go. ((moves to another group)) All right, this poster. What did you see that you want to link? ((stoops down toward student))
64. Mia: I want to link [ I want [ I want [ [Oh, it’s Mia’s turn. // ((speaks to Mia)) What did you see that is similar? What is the same?
65. Michael: [ Wait! I was gonna link the girls.
66. Teacher: [ Wait! I was gonna link the girls.
67. Mia: Um, the girls (and boys).
68. Teacher: The girls and boys ((points to the poster)) [that are on there? ((gives Mia a sticky note))
69. Student: [ Wait! I was gonna link the girls.
70. Teacher: Well, she’s got the girls and the boys ((indicating Mia)). What would you ((indicates this student)) like to link?
71. Mia: ((Looks up questioningly at the teacher)) And I’m going to link ((indicates poster)) all the girls and the boys?

72. Teacher: Mmmh. And then label your sticky note.

73. Student: The unicycles.

74. Teacher: The unicycle ((indicates poster)), the guy on the unicycle. ((hands sticky note to student)) Okay, can you circle all of those and link them for me? And then label your sticky note. ((gets up and leaves the group to circulate to another))

[end 7:36]
Appendix M - Episode 6 Transcription

Episode 6
[start 6:43]
1. Teacher: I see that everybody has at least one ((holds up one finger)) thing that they have added to their DOTS chart. Mmm. Go ahead and turn and talk with a partner. Share with your partner ((students start turning toward each other to form pairs)) what do you already know about animals. Harmony ((gestures upward)), I’m going to need you to get up, friend, so you can come share with somebody on the rug. Javier, Harmony is coming up ((interrupts herself)) Ope, never mind. Can you come share with Josiah ((points in direction of student))? And I actually will share with you two boys ((walks over to Josiah’s desk)). ((bends down to address Josiah)) (xxx) what do you already know about animals? Add something really quick ((points to Javier approaching student)) before he shares with you. ((Javier stands nearby))
2. Student: (xxx)
3. Teacher: Okay, so (then) ((points to the student’s DOTS chart, indicating he should write his idea)) // ((teacher crouches down and turns to address second student)) Okay, Javier, what did you add to your DOTS chart about animals?
5. Teacher: Bats. And, how do you know about bats? ((student approaches for paper; teacher gets up, hands it to her, and crouches back down))
6. Javier: (xxx)
7. Teacher: So, you learned that in reading groups? ((turns attention to Josiah)) And what did you add to your DOTS chart?
8. Josiah: (xxxx)
9. Teacher: Why did you add (zebras)?
10. Josiah: (xxxxxx)
11. Teacher: Mmm. ((stands up and leaves to go to another group, then turns back and addresses Javier, pointing to his DOTS chart)) You could add, if you want to add his idea, you can add it to yours. ((addressing Josiah)) If you want to add “bats” to yours, you can borrow his, too. ((walks to another group and crouches down)) What did you boys write?
12. Gabriel: (xxx) (because they are always done) (xxx)
13. Teacher: Mmm. ((nods head))
14. Student: (xxxxx)
15. Teacher: (turns to another student)) What did you add Omar?
16. Omar: (xx)
17. Teacher: ((smiles)) Oh, how did I know you were going to add penguins? ((laughs lightly, then stands and addresses the class)) I need your attention ((student who recently received a paper stands nearby)) “(xxxx) clipboards right there” ((points to where the clipboards are stored and student retrieves one)) I need your attention in five ((holds up five fingers; reduces fingers with each number of the countdown)), four, three, two, one, ze:ro. I lo:ve how I saw friends sharing their ideas from their DOTS charts, ((student takes her place with the rest of the class)) and I even saw friends borrowing ideas that they hea:rd ((smiles))
from a friend that they shared with. Now I want you: ((extends arm to the class)) to share with ((places hand on chest)) Mrs. Ramirez so I can add it to our ((turns and touches the class DOTS chart posted on the board at the front of the class)) class DOTS chart. ((some students begin raising their hands)) Look ((points to students)) at your board ((meaning clipboard)) and pick one thing ((holds up one finger)) you want to share with me. Now remember, if somebody else has the same idea, is it okay for you to share the same idea?

19. Teacher: Yes! ((says with excitement and arms outstretched)) That just means we all share those same ideas, and it’s awesome. All right, let’s start with the back ((of the room)) this time. Harmony, pick one thing from your chart and share it with the class.

21. Teacher: Elephants! And why did you write [“elephants” on your DOTS chart? ((turns to write the word on the class DOTS chart))

22. Gabriel: (((towards Harmony and speaks excitedly)) I write elephant, too!
23. Harmony: Because elephants are bigger than the tiger.
24. Teacher: Ooh, interesting. So you ((points to Harmony)) already compared animals. ((points to another student)) Olivia, what did you [have?
25. Gabriel: (((turning in Harmony’s direction)) They’re slow.
27. Teacher: Zebras. ((said with excitement; turns to write the word on the class chart)) Ooh, that’s another kind of animal. Amanda ((points to student)).
29. Teacher: Dangerous. ((said with excitement)) And why did you add dangerous?
30. Amanda: Because some animals are dangerous like tigers.
31. Teacher: Some animals are ((nods)) dangerous. María ((points to student))
32. Gabriel: ((turns toward other students, including Harmony)) Elephants are dangerous, too.
33. Teacher: Ooh, thank you for being respectful to friends who are sharing.
34. María: Pandas.
35. Teacher: Pandas! ((turns to write the word on the class chart)) Ooh, that’s another kind of animal.
36. Students: ((overlapping speech))
37. Teacher: Ope, we can wait ((puts hands together and stands straight)). Omar. ((smiles and points to student))
38. Omar: Penguins.
39. Teacher: ((turns to write on the class chart)) Ooh, and you shared that with me earlier while you were writing it. Adam. ((points to student))
40. Adam: Uh, dots?
41. Teacher: Dots? ((turns and walks to write the word on the class chart)) Ooh, why did you add dots?
42. Adam: Becau, because it’s a, I added dots because that’s what, um, what the, the topic’s about?
43. Teacher: *Oh, so you added dots* ((nodding)) because that’s our DOTS chart? Okay ((says with affirming tone)) Silvia ((points to student))
44. Siliva: Um, fox.
45. Teacher: Fox (turns to write the word on the class chart) love it. Sandra? (turns to look at student)
46. Sandra: Monkeys.
47. Teacher: Monkeys. (turns to write on chart) Ooh! You guys know about a lot of different kinds of animals.
49. Teacher: (pointing to student) Giorgio?
50. Giorgio: Bears.
51. Teacher: Bears (turns to write on chart). José?
52. José: Cheetahs.
53. Teacher: Cheetahs. Javier?
55. Student 1: Bats?
56. Student 2: Yes, bats.
57. Teacher: Omar?
58. Student: (Bunny) (teacher turns to write)
59. Teacher: Gabriel (points to student)
60. Gabriel: Elephants because, um, they’re the largest animal in the world.
61. Teacher: (points to “elephant” on class chart) Ooh, elephant. I’m going to put a little dot next to “elephants” because that’s the second person that has said elephants. Josiah (points to student)
63. Teacher: Lions. (writes the word on the chart)
64. Student: (xxxx)
65. Teacher: Ariana (points to student)
66. Ariana: Um, dolphins?
67. Teacher: Dolphins. (goes to write the word on the chart) So, friends (turns to face the class). Just from what you shared with me, I know that you guys know about a lot of different kinds (uses hands to make a large circle) of animals. So hopefully today we will learn more details about some of these animals and learn more about them.

[end 12:25]
Appendix N - Episode 7 Transcription

Episode 7
[start 16:42]
1. Teacher: So there’s our second word, “assist.” As you’re finishing writing it ((along the margin of students’ DOTS charts)), think about the word. What do you already know about the word “assist”? Think ((points to her head)) ((students write on their DOTS charts))
2. Javier: (xxxx) ((holds up writing utensil and shakes it questioningly))
3. Teacher: “We will be using those in a little bit.” Assist ((continues to put her hand to her head)) [. . .] All right ((said with enthusiasm)), turn and share with a partner, it doesn’t ((shakes head)) have to be the same partner, what do you think you already know about “assist”? ((asks question with hands out, palms facing up)) And remember, if you don’t know, that’s okay. Then just say ~I don’t know.~ Go ahead and turn and talk.
4. Student: ((to a peer)) I don’t know. ((Josiah gets up to come near the teacher, then walks back toward his desk, then walks up to look at the class DOTS chart for a while before returning to his seat))
5. Teacher: Let me share with / the girls today ((crouches down)) Okay, girls. What do you think you already know about “assist”?
6. Student: (xx)
7. Teacher: You think that means when the animals are gone? ((nods encouragingly))
8. Student: (xx) endangered.
9. Teacher: When they’re endangered. Ooh, you’re remembering our word from right before spring break. Nice job, sweetie pie. Okay. ((gets up to move to another group) Boys, ((approaches and then crouches down next to another group)) what are thinking about “assist”?
10. Student: I don’t know.
11. Teacher: ((with arms outstretched, palms facing up)) You don’t know? ((shakes head)) You don’t know either? ((directed to another student in the group)) Oh, we’re going to have a lot of learning this week.
12. Student: (xxxxxxx) assist means (xxxx) babies
13. Teacher: Ohh, so you’ve heard this word used before ((nods head)), and you think from what you’ve heard it means to help someone? ((stands)) Mmm.
14. Student: (xxxxxxxxx)
15. Teacher: Ohhh. Interesting. ((points to another student)) Yes, Miss Arya? ((stoops down toward student)
16. Student: (xxxxxxxxx)
17. Teacher: Yes ((extends hand toward student and takes utensil))
18. Josiah: ((approaches and then taps the teacher on the back, who turns to him)) Can I sharpen my pencil?
19. Teacher: Yes ((briefly touches his arm, then starts walking toward the other side of the room)) Here, I will sharpen it for you, bud. All right ((to class)), I need your attention in five, four, three, ((walks around the front of the class over to the pencil sharpener)) two ((sharpens pencil)), one, and zero ((turns head toward class)). Assist. Did anybody share
something with a friend (hands pencil back to Josiah) that they think they know about the word “assist”? (students raise their hands) Harmony (points to student), what did you share? (teacher gives a pencil to a student)

20. Harmony: Um, the elephants assist [they could protect, they could protect their babies animals

21. Student: [realizes utensil is not sharpened] Wait, this (xx) [ 

22. Teacher: [Oh! (smiling, takes utensil from student)) Oh, (directed to Harmony)) so you think ((swaps pencil out for another one that Josiah hands her)) animals assist by protecting their babies. Interesting. Olivia. (points to Olivia) (gives new pencil to student))

23. Olivia: Uh, cheetahs can (x), cheetahs can protect [babies.

24. Teacher: Can protect? Oh! So you think it has to do something with protect as well. Gabriel (points to student)).

25. Gabriel: Mm, somebody has to make somebody to do something?

26. Teacher: Oh, to make somebody do something (nods) Hmm. (points to next student)) Amanda.

27. Amanda: I’m going to the bathroom.

28. Teacher: Oh, yes, you can. Adam. (points to student))


30. Teacher: (with hand extended palm facing up, nodding) Like they help you. (nodding)

31. Giorgio: (Maybe) they’re endangered?

32. Teacher: (nodding) Maybe they’re endangered. (extends hand toward student) O:h, okay! (points to next student)) Ariana.

33. Ariana: Um, dolphins (xx) of (xxx)

34. Teacher: Oh, okay! So let me add some of those things that you guys shared with me. ((writes words on the class DOTS chart)) You guys shared “protect.” You guys said “help.” And I even heard “endangered.” Well now, let’s learn what these words mean. So pencils are going to go to the side ((motions with hand to her side)). Get your pens out ((motions like she is holding up a pen)), because everything that we learn from now on is new learning. It is not ((shaking her head)) what we already knew ((places hand on the back of her head)), it is something new ((says with hands in front, palms facing up)). [

35. Gabriel: ((xx) (shows the teacher his clipboard))

36. Teacher: Yep ((responding to Gabriel)). So let us put your pencils down ((begins to remove class DOTS chart from where it was posted on the board)), get your pens in your hands, and get ready to learn what these two words mean, “utilize” and “assist”. ((displays class DOTS chart on side of cart facing the students))

[end 20:49]
Appendix O - Episode 8 Transcription

Episode 8
[start 38:15]
1. Teacher: ((teacher approaches small group and observes what Jamal has written on his learning tool)) Oh, you guys haven’t done this one yet ((smiles and kneels on the floor by the group)) ’kay. Curb. ((enunciates the word)) What knowledge do have of that word “curb”?
2. Sarah: Like [((extends hands upward and leans slightly backward))]
3. Matt: [Like, you sit on the curb.]
4. Teacher: Huh uh ((disconfirming Sarah’s ideas)) Yeah! ((confirming Matt’s idea)) You sit on the “c” ((pauses for students to join in))
5. Matt: Curb.
6. Teacher: Curb, but what does that mean? Like a chair?
7. Students: No ((Jamal shakes his head, and teacher temporarily shifts her gaze to Jamal))
8. Matt: Curb of the driveway. ((extends his arm to illustrate a long driveway))
9. Teacher: ((nodding)) Okay, you could have a curb ((uses pinched fingers to demonstrate a thin, curved line)) on a driveway, at the end. ((nods)) ‘Kay.
10. Jesyka: You could hit the curb. ((quickly extends arm as though hitting something))
11. Teacher: ((directed to Jesyka)) You could hit the/ ((pauses for students to join in and makes a curb shape with her hand)) curb. Okay. ((nods)) So it kind of means the what? ((directs question to group; holds arm horizontally and moves it back and forth)) “Si” ((pauses for students to finish out the word))
12. Students: Side. ((students start writing on their tool))
13. Teacher: Side. ((nods)) I was telling them ((indicates another group in the class with her hand)) I went to the parade this weekend and I sat on the “c” ((sits further down, as though on a curb)) curb, the edge ((uses hand to indicate a line; comes back to kneeling position)) of that. Nice job.
14. Matt: I put three on.
15. Sarah: What parade was it?
16. Teacher: ((directs her attention to Sarah)) St. Patrick’s Day Parade ((smiles))
17. Matt: I was there.
18. Sarah: When was it?
19. Teacher: ((first makes a face like she is thinking)) Saturday. ((smiles))
20. Sarah: I went to there, too.
21. Teacher: ((smiling)) It was so much fun.
22. Sarah: I got lots of candy ((looks upward and does mini-clapping with her hands))
23. Teacher: Yeah, it was so fun. ((smiles and looks at other students in the group)) ((points to Jamal’s tool)) So, “curb,” go ahead and write your connection. We’re ((looks toward the iPad timer)), we don’t have too much more time.
24. Sarah: I (xxxxx)
25. Teacher: Yeah, it was fun. ((begins giving each student in the group a Skittle)) Good job. Nice conversations about that. Curb? ((said as though responding to a student-posed
question that is not observable on camera)) I think Ayan wrote “car” for “curb,” because he thought like “hit the curb.” ((stands and turns toward another group, then turns back around)) And really make sure, we’re gonna have to work hard on this word this week. It’s curb ((places fingers on chin and emphasizes the “b”)) not ((shakes head)) curve ((emphasizes the “v” and motions with arm like she is driving a car along a curved road)) **Now**, here’s a tricky one ((smiles and holds up one finger)), a curb could be “cur” ((indicates a curve with her arm but pauses speech to allow students to join in))

27. Teacher: Curved ((nods, smiles, and chuckles)) Whoa ((makes a silly face and uses one hand to gesture an explosion near her head)) (chuckles and starts to walk toward another group)) Mind blown. ((chuckles))

[end 39:38]
Appendix P - Episode 9 Transcription

Episode 9
[start 43:21]
1. Teacher: Well, before we start, I just need to know what ((extends both arms toward the class and leans in)) you know about baseball. ‘Kay. ((puts hand to her chest)) When I first started planning this, I’m gonna be honest, I did not have a lot of knowledge ((puts hands up to loosely frame both sides of her head)) about ((pauses for students to join in))
3. Teacher: So we’re going to start making our connection posters ((reaches behind her for the paper and a bag of pencils)) and this is what you guys do best. ((smiles)) So, you’re gonna be A-okay on this. ‘Kay, you’re gonna get your baseball teams, and it’s just ((picks one paper and shows it to the class)) what you know about baseball. When you hear the word “baseball,” what comes to your mind? It might be your dad watching baseball on Sunday afternoon. It may [(overlapping speech)]
4. Students: [be you playing catch. It may be your favorite team. Maybe food, I mean there are so many ((looks upward and gestures animatedly)) things that could come to mind. Each person’s ((picks up and holds up bag of pencils)) gonna have a special color. And you’re just gonna make your what? Your “con” ((makes a circular gesture with her hand, pausing her speech for students to join in))
5. Teacher: [be you playing catch. It may be your favorite team. Maybe food, I mean there are so many ((looks upward and gestures animatedly)) things that could come to mind. Each person’s ((picks up and holds up bag of pencils)) gonna have a special color. And you’re just gonna make your what? Your “con” ((makes a circular gesture with her hand, pausing her speech for students to join in))
6. Students: [be you playing catch. It may be your favorite team. Maybe food, I mean there are so many ((looks upward and gestures animatedly)) things that could come to mind. Each person’s ((picks up and holds up bag of pencils)) gonna have a special color. And you’re just gonna make your what? Your “con” ((makes a circular gesture with her hand, pausing her speech for students to join in))
7. Teachers: [be you playing catch. It may be your favorite team. Maybe food, I mean there are so many ((looks upward and gestures animatedly)) things that could come to mind. Each person’s ((picks up and holds up bag of pencils)) gonna have a special color. And you’re just gonna make your what? Your “con” ((makes a circular gesture with her hand, pausing her speech for students to join in))
8. Student: [No.
9. Teacher: Answer?
10. Students: No.
11. Teacher: No! Matt ((student lifts his head and listens)), you’re my ((initially looks upward as she reflects)) very favorite example. When we first started this, at the beginning of the year, I remember you like made this really weird connection ((Matt smiles and nods his head a few times in agreement)), and I almost got like mad (said with incredulous tone). I was like “Matt, that’s not on topic” ((self-mocking tone)) ((Matt leans his head down to his elbow, hiding his face)). But then you would “expl” ((pauses for students to join in))
12. Matt: “plain” ((smiles as he chimies in, then rests his head on his hand))
13. Teacher: Explain it to me and I was like “Yeah, *that’s a good connection ((nodding))*”
14. Student: [Explain
15. Teacher: So sometimes if it seems a little off, that’s just what that person’s what? “Thi” ((puts hand on head and pauses for students to join in))
17. Teacher: Thinking ((puts hand on chest)) or how they’re attached to it.
[end 44:49]
Appendix Q - Episode 10 Transcription

Episode 10
[start 51:22]
1. Teacher: ((approaches small group and leans down toward group; nods head in response to an inaudible comment or question from Sarah))
2. Michael: (They’re not really knowing anything about those) (?terms) (xx).
3. Teacher: Pose? Okay, I like that. ((Teacher pulls out a chair and takes a seat at an unoccupied desk in the group.)) And what do you mean like by “pose”? Michael: (xxxxxx) ((Gestures as though he is holding a baseball bat and getting ready for a pitch))
4. Teacher: Okay, now, so make some connections onto that. You just gave me a lot of ideas. You know it’s holding a ((extends hand toward Michael and pauses for him to fill in the blank))
5. Michael: Bat. ((reaches to write on the group poster))
6. Teacher: But what kind of bat? Like a furry: black animal bat?
8. Sarah: Baseball bat. ((smiles; Jackson smiles as well))
9. Teacher: O:h ((looks up at ceiling, smiles, and claps her hands)), so you have to hold a bat, and you just said you’re standing in what? ((points toward Michael’s side of the table)) Mud? What? ((Sarah and Michael write on the group poster))
10. Teacher: ((gets up from the desk and stands to address the group along with the rest of the class)) You can use pictures, too:: Pictures might be helpful if you don’t exactly know what it’s called ((moves hands in a circular manner; smiles as she approaches another small group)). Oh, and Joshua ((who has a much higher desk than his teammates)), did you ask them ((another group)) if you could use that ((spare)) desk over there? Go ask them. I think that might be more comfortable. ((Tanya, a teammate, gets up and walks over to the other group)) Oh, thanks Tayna for stepping up to the plate. ((smiles at her intentional pun; observes the interaction between students))
11. Bethany: ((looks over her shoulder to make eye contact with the teacher)) Hotdogs. ((smiles))
12. Teacher: ((Nods, smiles)) Hotdogs. Yes, they always have hotdogs. ((directs attention back to students discussing desks)) So is everyone okay? You guys gonna switch? ((uses hands to indicate switching places)) [ . . . ]
13. Teacher: ((approaches another group and leans down on empty desk)) Good job, Skyler! ‘Cause I know at games, what do you do?
15. Teacher: Cheer. Okay, yeah ((nods; reaches over to turn the group’s poster and pull it closer to the center of the group)) Okay, so let’s put it this way so everybody can like, do stuff. So, Antonio, what do you think about baseball? When you hear “baseball,” what do you think about?
17. Teacher: ((gestures toward the group poster)) [Write that.
18. Antonia: [I already had it down.
19. Teacher: Oh (x), but can you label that? ((Antonio reaches over to write on the group poster) Stadium, ‘kay.
20. Nathan: I put, we put, um ((teacher directs gaze toward Nathan)) (xxxxx)
21. Teacher: Now, you’re from Colorado, right? ((nods slightly))
22. Nathan: Yeah. ((makes eye contact with the teacher))
23. Teacher: Do you know their team? ((student looks off to the side as though he is thinking))
   Colorado, do you know what they’re called? ((nods encouragingly))
25. Teacher: ((smiles)) N, well that’s football, yeah.
26. Nathan: I don’t, I don’t know.
27. Teacher: [Colorado Rockies is their baseball team. ((smiles)) ((Nathan nods his head))
   Colorado Rockies! ((nods)) Yeah.
28. Olivia: (xx)
29. Teacher: ((directed to Olivia)) Yeah ((gestures to the poster)), you could write the Rockies as a team. Yeah ((smiles)) ((Olivia pulls the paper closer to write)) And what else do you know about baseball, Olivia? When you hear baseball, like what do you think about?
30. Olivia: // ((teacher smiles while waiting for Olivia’s reply)) (xxxx) ((extends hands up on either side to indicate an amount))
31. Teacher: Okay, they have more than “w” ((begins to say “one” and pauses for student to join in)) one? Why do they have more than one?
32. Olivia: (xxxxxxxxxx) ((uses hand gestures to support her communication with the teacher))
33. Teacher: Okay, so you’re thinking I think more of like the people who make them. ((extends her hand with palm facing up toward Olivia))
34. Olivia: (xx)
35. Teacher: ((does a big nod)) Okay, so maybe you could put that ((points to the group poster)). You need a lot of bats. But what I ((puts hand on chest)) was thinking was ((stands)) if you’ve ever been to a baseball game and they hit ((makes a pose as though she is holding a bat)) it really hard ((gestures a swing of the bat)), sometimes they break the ((gestures to indicate the length of a bat)) “b” ((pauses for students to join in))
36. Michael: Home run!
37. Teacher: And that would be a what? ((extends hand toward Michael)) A home ((pauses for students to join))
38. Olivia: Home run.
39. Teacher: Run. ((extends hand toward Olivia, smiles)) And so you have to have lots ((turns as though seeing a row of extra bats)) of bats actually at the game ‘cause they might “b” ((pauses for students to join in))
40. Students: Break them
41. Teacher: Break it, yeah! So if you, if they hit a home run, you’re definitely gonna be saying, “Go, “t” ((raises hand to act out a cheer; pauses for students to join in))
42. Olivia: Team.
43. Teacher: Team ~ ((nods head)) ((turns to walk toward another group))
[end 54:39]
Appendix R - Episode 11 Transcription

Episode 11
[start 63:13]
1. Teacher: All right. Now it’s your own individual time. So now we have a BIG ((expressively raises both arms to make a large circle)) poster. What we know about baseball. ((moves arms to indicate the entire class poster; moves poster closer to middle of the front of the room)) I want you to pick the most important thing you put on your poster yourself. Your gonna put it on a “sticky note” ((indicates sticky note she is holding)). “You can put your name on it if you want but you don’t have to.” And we’re gonna collectively make a big ((moves arms to indicate the entire class poster)) poster of all of our knowledge—what we know about ((pauses for students to join in))
2. Student: Baseball.
3. Teacher: Baseball. Now, I’m gonna give you hint. If you only know about baseball, a baseball or a bat, then put that. But I really want you to kinda go outside your ((acts out stepping outside a box)) box a little bit. Think about the best ((walks toward a student group and directs comment in that direction)) thing you put on your poster, that you think is just “Man, I know this.” ‘Kay, so think outside the box a little bit past just baseball ((steps to the side)) and baseball bat ((makes a tiny hop to the side)). Now if you’re like I was and you’re like “Man, that’s really all I know about baseball is they use a baseball bat ((shrugs arms)), then that’s okay, too. ‘Kay, but I want us to try to think a little bit ((uses hand to indicate movement away)) further and stretch ourselves. All right! So, just give you about 30 seconds ((starts handing out a sticky note to each student)). Once you get your idea, Thanks, Miss Martin ((who comes by to get some sticky notes to help pass them out)) [. . .] ((Katherine begins writing something on her group’s poster; others begin writing on their sticky notes))
4. Student: So what are we supposed to do?
5. Student teammates: We’re gonna put the jersey
6. Teacher: All right. So, I’m just gonna give you about 30 seconds, go ahead and put your best connection that [you made and then add it to our big poster.
7. Miss Martin: [xxx] it on there. ((continues handing out sticky notes; hands the extras back to the teacher))
8. Teacher: Samantha, did you get one?
10. Teacher: Okay.
11. Student: Ms. Scott, can we write two things?
12. Teacher: Okay ((jokingly, as though it’s a huge request)) I’ll let you have two, three (xxx) ((walks to the front of the room shaking her head))
13. Miss Martin: So no (xxxx) ((switches the direction of Katherine’s sticky note, points to it, directing her to write her idea on the note))
14. Teacher: And, Miss Martin and I [ 
15. Miss Martin: [And I’m going to do the same thing, too. ((teacher gives a sticky note to Miss Martin))}
16. Teacher: Best connection. ((teacher and Miss Martin walk to the teacher desk at the front corner of the room with the computer)) ((students work on their sticky notes; when finished, they add them to the class poster at the front of the room))

17. Student: Can you put four? ((question goes unanswered; teacher and Miss Martin are conversing quietly hunched over at the desk at the front of the room; then they walk to the class poster and add their ideas along with the students))

18. Teacher: ((speaking to one of the students at the front)) "That was a good connection, Bethany." ((addresses class)) After you’re done, come join me on the perimeter. ((sits down on the carpet at the front of the room)) Miss Martin, now’s your time to shine. Guess what you’re gonna do?

19. Miss Martin: I’m gonna sort ‘em?

20. Teacher: Ah yeah. But kinda quick, ‘cause we’ve got our baseball terms that we’ve gotta work on. ((students begin forming a circle on the carpet around the perimeter of the front of the room))

21. Bethany: (seated next to the teacher addresses her) (Mine is silly and) (x).

22. Teacher: ((responding to Bethany)) (Hmm. It is silly and) (x). (addressing class) All right, I’m gonna give you about ten more seconds if you haven’t made your connection yet. 10, 9, ((students join in)) 8, 7, 6, 5, (only Katherine remains writing) go faster ((picks up speed on the countdown)), 4, 3, 2, 1 (Katherine gets up to add her sticky note to the class poster). Say strikeout.

23. Teacher with students: STRIKEOUT! ((moves hands near the ground to indicate strikeout))

24. Student: Katherine strikeout.

25. Teacher: ((corrects)) Just in time. Oh, oh MA:C! ((says MAC in a musical way)) gets up and walks toward class poster)

26. Students: OH, YE:S! ((mimicking the teacher’s melody))

27. Teacher: We’re gonna be on the carpet on the perimeter, so we are gonna sit crisscross applesauce spoons ((students join in, and speak in a sing-song way)) in your bowl, eyes on teacher. All right, so now together (puts hands together to make a small circle), we’re gonna kinda sort these into what? ((uses hands to form small groupings)) Like “grou” ((pauses for students to join in))

28. Students: Groups.

29. Teacher: Groups. So things that kinda have common threads to them. Be sure that you keep your spoons in your bowl ((walks to the other side of the class poster)), ‘cause I’m gonna be like walking ((uses hand to indicate the direction she might walk)) a lot. "And you know that one time I almost tripped. It was really embarrassing." So at least have spoons in your bowl. All right. What do we see a little bit here?

30. Miss Martin: I see lots, a couple that say ‘home run’.

31. Teacher: Ho:me run. If you hit a home run, what does that mean? ((moves hands to indicate something going far))


33. Teacher: You hit the ball out of the ba:ll’p” ((pauses, anticipating students joining in)).

34. Teacher: Stadium ((nods)). I really like that word better. Stadium. ((stoops down toward students)) "By the way, you might want to be ((puts finger near ear)) listening for some of
these key words because we’re gonna do an activity where you have to sort baseball words ((uses hands to make a rectangle shape)) You might want to be listening really carefully.° ((turns attention back to poster)) (addresses Miss Martin))
35. Miss Martin: (xx)
36. Teacher: Um, nope. I think we’re doing pretty good. ((laughs a bit))
37. Miss Martin: And this one we have all the bases.
38. Teacher: ((nods, makes affirmative sound))
39. Miss Martin: First base, second base, third base ((moves sticky note into different spot))
40. Teacher: ‘Kay. ((addresses class)) Oh, I love this one. It says, “Go: “T” ((pauses for students to join in))
41. Students: Team!
42. Teacher: Team! And someone had those little fingers ((waves a finger back and forth)) that you see with the number one like ((makes a funny face and moves her finger back and forth, speaking in a silly way)) “da, da, da, da, da, da”. Yep, go team. Uh, ope.
43. Miss Martin: They run.
44. Teacher: Team run. ‘Kay. Oh, I love it! People are writing, ((picks up a sticky note and turns to the class)) this really makes, uh, me think that you are making a text-to-self ((puts hand on chest)) connection. They said ((reads sticky note)), “Family.” This means I know these people, this is something their family “d” ((pauses for students to join in; no one does immediately))
45. Nathaniel: Does.
46. Teacher: [What? Does. So they like to enjoy baseball “to-g” ((pauses for students to join in))
47. Student: “-gether”
48. Teacher: “-gether.” *This one said* “hotdogs” and “family”. I know that was Bethany’s. ((Bethany covers her mouth and giggles))
49. Miss Martin: [Here’s a couple that (x) have trophies. ((looking a groups of sticky notes))
50. Teacher: Yeah. ((nods))
51. Miss Martin: (x) a trophy.
52. Teacher: They have “fans.” ‘Kay. ((turns back to face class)) So, yeah. The people at the game, we call them what?
54. Teacher: Fans. And this reminds me of my friend, Amelia Bedelia. ((some students giggle)) Fans. Like, that kind of fan? ((raises arm to point to the ceiling fan or a fan across the room))
55. Students: No!
56. Teacher: ([laughs]) Fans are the ((pauses for students to join in))
57. Students: People.
58. Teacher: *People*. That’s one of those tricky words.
60. Bethany: They’re the audience.
61. Teacher: So, “fans” ((moves a sticky note on the poster))
62. Student: Like subscribers.
63. Teacher: [Team. ((nods head))
Miss Martin: It could almost go to this one, with like the [theme maybe? ((students murmur ideas; Dylon starts to play with the projector screen))]

Teacher: [Oh ((nods)), so why would Miss Martin, Dylon, put “fans” with “go team”?]

Student: Yeah.

Matt: Because the fans are like [((raises hand up and down)) “Go team! Go team!”]

Nathaniel: [They’re supporting them.]

Teacher: The fans are what? “Su” ((pauses for students to join in))

Students: “-porting”

Teacher: Supporting them. I like that. ((reads sticky note)) Snacks ((nods and begins placing the note)) I’m gonna put that one kinda right here. [So that (x) goes with (x)]

Miss Martin: [And this one it says “Cubs.” This is a baseball ((pauses))]

Teacher: Oh, that’s a what? A “t” ((pauses for students to join in))

Students: Team.

Teacher: Team, which is what it says, “team.”

Miss Martin: So, I’m gonna put that one down here.

Teacher: Um, a bat.

Miss Martin: And this one has “baseball” and “bat.”

Teacher: Okay, so that would be something to use.

Miss Martin: And a “coach.”

Teacher: Ooh, ((turns to class and extends hand, palm up)) a coach. That was really good. Someone did put “coach.” ((walks over to the desk with the computer))

Kaylee ((who sits next to the computer desk)): Ms. Scott

Teacher: ‘Kay.

Miss Martin: And this one says [“coach.”]

Teacher: [x]

Miss Martin: [The coach is helping, too.]

Kaylee: [The one that said “Cubs,” was something that you wear? ((gestures putting on something, then tips her head and watches the teacher, waiting for clarification)).]

Nathaniel: A jersey!

Teacher: ((to Kaylee)) So what is that called ((uses hand to indicate the front of a shirt))? You wear it. [Jersey.

Teacher: (still addressing Kaylee) It’s called a ((pauses))

Kaylee: Jersey.

Teacher: Jersey. Good job ((nods head)). ((addresses class)) A jersey is what they “wh” ((pauses for students to join in))

Students: Wear.

Teacher: Wear. All right! ((sits back down on the carpet)). So, judging by this, I can definitely see that we do have some background ((pauses and motions for students to join in))

Students: Knowledge.

Teacher: Knowledge of this.

[end 70:22]
## Appendix S - Learning Mediation Tools

### Table S.1. Description of Learning Mediation Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOTS chart</td>
<td>DOTS Chart Strategy (e.g., Herrera, 2022; Herrera et al., 2011; Herrera et al., 2017)</td>
<td>A–Z chart on which students individually document background knowledge connections to the topic by adding ideas inside the boxes using pictures and words. Vocabulary words then are written in the margins around the A–Z boxes. Throughout the lesson, students add information and draw lines to physically represent connections between words/ideas on the DOTS chart, including words and pictures inside and outside the boxes.</td>
</tr>
<tr>
<td>U-C-ME template</td>
<td>U-C-ME Strategy (e.g., Herrera, 2022; Herrera et al., 2011; Herrera et al., 2017)</td>
<td>Graphic organizer on which students add key background knowledge connections to a central circle that contains the topic. On spokes that radiate outward from the circle, they write questions (e.g., essential questions, class-generated questions, self-selected questions) that will guide their learning. In a circle at the end of each spoke, students document the answer to the corresponding question and include the page number that provides text evidence.</td>
</tr>
<tr>
<td>Vocabulary Quilt</td>
<td>Vocabulary Quilt Strategy (e.g., Herrera, 2022; Herrera et al., 2011; Herrera et al., 2017)</td>
<td>Paper folded to have eight boxes, with a vocabulary word then written in the center of each box. Students document their background knowledge connections to each term using words and pictures, typically working in small groups. Students later add new learning to the quilt, often by writing ideas on sticky notes and adhering them to the quilt. Learners also confirm/disconfirm their initial ideas.</td>
</tr>
<tr>
<td>Linking Language poster</td>
<td>Linking Language Strategy (e.g., Herrera et al., 2011; Herrera et al., 2017)</td>
<td>Large poster paper on which a picture related to the content is adhered in the middle. Students work in small groups for a short time to document their ideas related to the image using words and pictures. Then the group of students rotates to another poster with a different image. After groups have rotated to each poster and have returned to their original poster, they then collaborate to link words and ideas on the poster that have elements in common.</td>
</tr>
</tbody>
</table>
| Tic-Tac-Toe board | Variation on the Pic-Tac-Tell Strategy (e.g., Herrera et al., 2011; Herrera et al., 2017) | Mid-sized poster paper with a 3x3 grid of boxes, with one vocabulary word written by students in the center of each box. Learners work in small groups to document their background knowledge connections to each term using words and pictures. As the lesson progresses, they add new learning to the board. Students eventually write sentences using three vocabulary words in each; they select the vocabulary words in a tic-tac-toe fashion (e.g., words that form a vertical, horizontal, or diagonal line).

| Connection poster | Michelle’s lesson | Mid-sized poster paper on which “What we know” and the topic are written. Students work in small teams to document their individual background knowledge connections to the topic using pictures and words.

| Class connection poster | Michelle’s lesson | Large poster paper on which “What we know about . . .” and the topic are written. All members of the classroom learning community (i.e., students and teachers) add a sticky note with a self-selected, personal background knowledge connection to the topic. These sticky notes are then thematically organized by the teacher to support class discussion of the community’s collective background knowledge. |