LOYOLA UNIVERSITY CHICAGO 1870 AD MAJOREM DEI GLORIAM eCOMMONS

Loyola University Chicago
Loyola eCommons

Education: School of Education Faculty Publications and Other Works

Faculty Publications and Other Works by Department

2023

Instructional Design With a Language Lens: Preparing Educators for Multilingual Classrooms

Amy J. Heineke
Loyola University Chicago, aheineke@luc.edu

Wenjin Guo
Loyola University of Chicago, wguo1@luc.edu

Luke Carman
North Carolina State University

McTighe & Associates

Follow this and additional works at: https://ecommons.luc.edu/education_facpubs

 Part of the Curriculum and Instruction Commons, and the Educational Technology Commons

Recommended Citation

Heineke, Amy J.; Guo, Wenjin; Carman, Luke; and McTighe & Associates. Instructional Design With a Language Lens: Preparing Educators for Multilingual Classrooms. Handbook of Research on Solutions for Equity and Social Justice in Education, , : 154-174, 2023. Retrieved from Loyola eCommons, Education: School of Education Faculty Publications and Other Works, http://dx.doi.org/10.4018/978-1-7998-9678-4.ch010

This Book Chapter is brought to you for free and open access by the Faculty Publications and Other Works by Department at Loyola eCommons. It has been accepted for inclusion in Education: School of Education Faculty Publications and Other Works by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
© IGI Global, 2023

Handbook of Research on Solutions for Equity and Social Justice in Education

James Etim
Winston-Salem State University, USA

Alice Etim
Winston-Salem State University, USA

A volume in the Advances in Educational Marketing, Administration, and Leadership (AEMAL) Book Series

Published in the United States of America by
IGI Global
Information Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: http://www.igi-global.com

Copyright © 2023 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

Library of Congress Cataloging-in-Publication Data

Names: Etim, James, editor. | Etim, Alice S., 1962- editor.
Title: Handbook of research on solutions for equity and social justice in education / James Etim, and Alice Etim, editors.
Description: Hershey, PA : Information Science Reference, [2023] | Includes bibliographical references and index. | Summary: "This research book takes a global perspective on the issues of equity and social justice, defining what it is and how it affects society as well as examples of strategies that can be implemented in schools to encourage inclusion and social justice"-- Provided by publisher.
Identifiers: LCCN 2022008808 (print) | LCCN 2022008809 (ebook) | ISBN 9781799896784 (hardcover) | ISBN 9781799896807 (ebook)
Subjects: LCSH: Social justice and education. | Equality.
Classification: LCC LC192.2 .H364 2023 (print) | LCC LC192.2 (ebook) | DDC 370.11/5--dc23/eng/20220302
LC record available at https://lccn.loc.gov/2022008808
LC ebook record available at https://lccn.loc.gov/2022008809

This book is published in the IGI Global book series Advances in Educational Marketing, Administration, and Leadership (AEMAL) (ISSN: 2326-9022; eISSN: 2326-9030)

British Cataloguing in Publication Data
A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

Table of Contents

Chapter 10
Instructional Design With a Language Lens:
Preparing Educators for Multilingual Classrooms

Amy J. Heineke
https://orcid.org/0000-0002-4219-3600
Loyola University Chicago, USA

Wenjin Guo
Loyola University Chicago, USA

Luke Carman
North Carolina State University, USA

Jay McTighe
McTighe & Associates, USA

ABSTRACT

Classrooms are more diverse than ever before with increasing numbers of multilingual students who are developing English proficiency while simultaneously being expected to learn and perform in English in literacy and the content areas. In the context of the United States, previous efforts to prepare teachers for the heterogeneous population of students have led to simplified curriculum that limits children's equitable access to rigorous disciplinary learning. This chapter probes one project's efforts to build capacity in schools by holistically preparing educators across grades and disciplines to provide equitable instruction for students labeled as English learners. Using a framework that added a language lens to the understanding by design framework already used in partner schools, participants developed understandings and practices that facilitated curricular design that maintained focus on language across instruction.

DOI: 10.4018/978-1-7998-9678-4.ch010

Copyright © 2023, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

INTRODUCTION

In schools across the United States and around the world, a diverse array of students enters classrooms ready to engage in learning and exploration. Recent statistical data indicate that approximately 20% of students in U.S. public schools speak a language other than English at home (National Center for Education Statistics [NCES], 2021). This results in a significant student sub-group that includes ample linguistic and cultural diversity. About half of these students, approximately five million or 10% of the kindergarten-through-twelfth-grade (K-12) student population, are considered *English learners* (ELs). *EL* is a formal label ascribed to students developing English proficiency as measured by standardized language tests of listening, speaking, reading, and writing (Linquanti & Cook, 2013, NCES, 2021). Despite the opportunities provided by this diversity, the demographic shifts of recent decades have resulted in various challenges in disciplinary classrooms, where teaching and learning typically occurs in English (Bunch, 2013; Moschkovich, 2013; van Lier & Walqui, 2012). To ensure that students have equitable access to content instruction, educators must explicitly attend to language development in daily instruction (Commins & Miramontes 2006; Lucas et al., 2008).

Simultaneous with the diversifying demographics spanning urban, suburban, and rural regions of the United States, educational reform efforts have bolstered the emphasis on language. In K-12 classrooms, the shift to the Common Core State Standards (CCSS) has reinforced the language-rich nature of content areas like science and mathematics (National Governors Association Center for Best Practices [NGA Center] & Council of Chief State School Officers [CCSSO], 2010; National Research Council [NRC], 2013). The language focus prompts instruction that merges listening, speaking, reading, and writing to build core practices, skills, and concepts and yield real-world problem solvers and communicators. At universities, the adoption of the Teacher Performance Assessment (edTPA) has led teacher educators in many states to prioritize academic language in teacher preparation coursework (Stanford Center for Assessment, Learning, and Equity [SCALE], 2018). Shifting practices increasingly emphasize how disciplinary language develops simultaneous to learning and incorporating language development into instruction. These policy shifts have prompted the need for an approach to instructional design that promotes rigorous disciplinary learning *and* language development.

Understanding by Design® has been guiding educators' curricular design for the past two decades, prompting rigorous teaching and authentic learning in classrooms across the world (Wiggins & McTighe, 2005). A flexible framework that spans disciplines and grades, Understanding by Design (UbD) prompts teachers to move beyond the coverage of curriculum to instead design instruction that creatively and authentically deepens students' understandings and prompts transfer of learning to other contexts. In this chapter, we describe adding a language lens to the existing UbD framework to prepare teachers to design instruction in increasing multilingual classrooms. Seeking to promote equitable access to rigorous disciplinary instruction for students labeled as ELs, this approach differs from traditional tendencies in the field, such as maintaining content and language as separate entities of teaching and learning or simply adding a box at the end of a planning template for a one-size-fits-all strategy. Instead, this approach responds to the changing demographics, policies, and practices in schools to prepare disciplinary teachers who can support students' language development to promote rigorous and meaningful learning in the classroom (Heineke & McTighe, 2018).

BACKGROUND: ENGLISH LEARNER EDUCATION IN THE UNITED STATES

English learners have long been a presence in U.S. schools, garnering attention in the latter half of the 20th century. As a part of the Civil Rights movement in the 1960s, the Elementary and Secondary Education Act (ESEA), including the American Bilingual Education Act (BEA), sought to bring attention to ELs (Lyons, 1995; Public Law 90-247, 1968; Yarborough, 1967; Yell, 2013). This federal policy recognized the urgency to meet the linguistic needs of ELs, allowing the use of students' first languages for teaching and learning (Public Law, 1968; Punches, 1985). The policy's purpose was not to provide a definition or mandate bilingual education, but to serve as the funding incentive to support states and districts to establish bilingual education programs.

Following ESEA, landmark court cases resulted in federal policies that further shaped the landscape of EL education. Lau v. Nichols (1974) deemed it illegal to allow children to sink or swim in English-only general education classrooms, requiring schools to provide language accommodations (Alexander & Nava,1977; de Jong, 2011). The resulting Lau remedies from the Office of Civil Rights (OCR) compelled districts to demonstrate approaches to identify students' home languages, evaluate English proficiency, and determine program effectiveness (Cardenas, 1976). Building from those efforts, Castañeda v. Pickard (1981) resulted in a three-pronged test to ensure sound nature of EL programming based on educational theories, effective implementation results, and positive language acquisition. These policies solidified the imperative for educators to provide sound and effective supports for students learning English.

The Castañeda three-prong test resulted in programs including bilingual and English as a Second Language (ESL), with the latter as the priority in the 1980s (Crawford, 2000; Dicker, 2003; Lyons, 1995; Woolard, 1989). *Sheltered* or *structured* English immersion programs emerged to promote proficiency in English while students worked toward graduation standards, which received federal funding in line with BEA priorities. In states and municipalities, ideological battles between English-only and bilingual advocates waged as stakeholders either supported or discouraged students' home languages in school environments. Emergent from the English for the Children campaign, voters in three states passed propositions prohibiting the use of bilingual education with ELs in schools and instead requiring English-only sheltered immersion programming: California with Proposition 227 in 1998, Arizona with Proposition 203 in 2000, and Massachusetts with Question 2 in 2002 (Wright, 2005).

Despite priority being given to sheltered instructional programming in state and federal policy, there existed little guidance for implementation of this approach in practice (Echevarría et al., 2013). The *Sheltered Instruction Observation Protocol* (SIOP) tapped into existing research to generate school-wide, holistic interventions to support ELs across different subjects (Short et al., 2011). The model sought to integrate language development within disciplinary learning, providing teachers with an eight-part template to guide lesson planning (Echevarría & Short, 2011). Despite its widespread use, SIOP has critiques from theoretical, methodological, and practical perspectives (Crawford & Reyes, 2015; Silzer & Parson, 2015). Scholars have raised concerns regarding (a) contradictory theoretical foundations with emphasis on explicit teaching of discrete skills over deeper understandings, (b) limited research base of effectiveness beyond a handful of studies by SIOP authors, (c) its application beyond the originally targeted audience of ELs at intermediate language proficiency, and (d) the many rigid lesson components that make instructional planning laborious.

Despite its intention to support educators in designing disciplinary instruction for ELs, the SIOP model was frequently implemented in ways that separated students based on English proficiency and yielded watered-down curriculum with lowered expectations and without home language supports (Oakes

et al., 2013). In this way, while English-proficient students engaged in rich, grade-level, inquiry-based learning in general-education classrooms, ELs in sheltered classrooms received instruction focused on discrete, low-level skills and decontextualized vocabulary (Gibbons, 2009). This divide between so-called mainstream and sheltered classrooms resulted in siloed practice and preparation among teachers. For example, even in the same grade level or department, teachers in general education classrooms might plan curriculum using UbD whereas teachers of ELs used the SIOP model. Teacher preparation mirrored these disparate approaches to instructional design: ESL, bilingual, and sheltered teachers developed EL-specific repertoires, whereas general educators did not (Gándara et al., 2005; Genesee et al., 2006).

While educators grappled with these challenges moving into the 21st century, the EL population continued to grow. No Child Left Behind (NCLB) resulted in decreased use of bilingual programs and enhanced pressure to move ELs into English-medium classrooms (Lucas & Grinberg, 2008). Within this context, scholars and teacher educators tentatively explored the possibility of framing all general-education classroom teachers as EL-prepared educators (Bunch, 2013; Garciá et al., 2010; Lucas, et al., 2008). Scholars recommended that practitioners build from existing content and pedagogical knowledge to develop (a) understandings of language learning, (b) knowledge about their ELs cultural and linguistic backgrounds, (c) culturally and linguistically responsive instructional approaches, and (d) sociopolitical awareness of values, cultural norms, and subjectivities (Cochran-Smith & Zeichner, 2005; Darling-Hammond & Bransford, 2005; Garciá et al., 2010; Harper & de Jong, 2004; Ladson-Billings, 1995; Lucas, et al., 2008; Samway & McKeon, 2007).

The shift to the CCSS and Next Generation Science Standards in 2010 prompted action upon these recommendations. Under the backdrop of the promotion of new standards, ELs' language development was no longer the responsibility of EL specialists, rather than a shared endeavor across disciplines (Bunch, 2013; Lucas et al., 2018). All practitioners needed to understand language progressions, demands, scaffolds, and supports, which were recommended to be infused into pre-service teacher education programs and professional development for in-service educators (Santos, et al., 2013). More importantly, new standards provided the opportunity to rethink previous deficit-based practices that often resulted in ELs receiving watered-down curricula in segregated settings (van Lier & Walqui, 2012). In teacher education programs and professional development, stakeholders developed pre-service and in-service teachers' comprehensive knowledge of curricula, instructions, and evaluations for ELs' in line with new standards (Bunch, 2013; Santos et al., 2013; van Lier & Walqui, 2012).

In the last decade, U.S. schools have worked to implement these changes and recommendations, which often centers on teacher preparation. School-based efforts to prepare all teachers for ELs include collaboration within schools where teachers work together across classroom contexts (e.g., Russell, 2014; Villavicencio, 2021), as well as partnerships extending beyond schools to provide aligned professional development (Dover & Rodríguez-Valls, 2018; Plough & Garcia, 2015). The next section explores one collaborative project seeking to accomplish these important and challenging tasks: maintaining rigorous disciplinary instruction while supporting language development and preparing content-area teachers to facilitate this dual-focused approach in their classrooms with students.

LANGUAGE MATTERS: EQUITY AND INCLUSION FOR ENGLISH LEARNERS

The shift to the CCSS marked a drastic shift in the education of students labeled as ELs. When the rigorous standards came out, EL scholars and practitioners embraced the opportunity to change the

field. Organized by Stanford University, the Understanding Language group involved experts in ELs spanning disciplines, including literacy, mathematics, science, social studies, and teacher education. These scholars sought to shift the decades long tendency to simplify and reduce the rigor of literacy and disciplinary instruction for ELs and instead maintain the expectations of the new standards while scaffolding for language simultaneously (e.g., Bunch, 2013; Moschkovich, 2013; Santos et al., 2012; van Lier & Walqui, 2012). This groundbreaking work of the Understanding Language group prompted grant funding to promote the application of these conceptual frameworks into daily practice. In one urban region of the Midwest, a local foundation made this the priority of a request for proposals, where partnerships between stakeholders at universities, school districts, and community organizations could apply for funding to support teacher preparation for ELs amid the shift to the CCSS.

The Language Matters project emerged from this work. A partnership between one mid-sized, private, urban university and one large, public, urban school district, the efforts centered on building capacity within and across schools. The goal was to disrupt tendencies that had typified the field to nurture the disciplinary learning and language development of the high number of students labeled as ELs in the district. First, the work sought to remove the siloes that typify schools and prepare teachers to support language across grades and disciplines. Second, the collaboration targeted specific regions of the city to ensure that capacity building efforts were responsive to unique multilingual communities. Third, the project spanned K-12 contexts to promote longitudinal language development as ELs moved through schooling. Fourth, the work aimed to holistically approach teacher professional development and practice without adding new planning tools or templates distinct from colleagues. In sum, the Language Matters project aimed to build capacity to allow ELs to receive rigorous curricular and meaningful instruction from expert teachers who strategically design and scaffold for their language development.

Collaboration and responsiveness emerged as key levers of this work. Prior to initiating this work, the education faculty had committed to creating and maintaining mutually beneficial partnerships with schools and communities as a part of their field-based teacher preparation program (Heineke & Giatsou, 2020). The Language Matters team at the university, comprised of teacher educators spanning EL, literacy, and the content areas, built from these existing partnerships and leveraged new ones in focal regions to maintain the K-12 scope of the work. From there, the collaborative nature of the project took hold, with the school stakeholders driving the work and university faculty responding to their unique contexts and situations. From these initial conversations emerged the integral focus on Understanding by Design®, a curricular design framework used for decades in primarily general education classrooms to plan inquiry-based curriculum with authentic instruction that developed in-depth, comprehensive understandings (Wiggins & McTighe, 2005). Schools were already using this framework to plan instruction, so the logical next step to reach the above-stated goals was to add a lens on language to the UbD template and provide professional development around its use. In the sub-sections that follow, we (a) introduce the *design* of UbD with a language lens and (b) explain the *implementation* professional development efforts around its use.

Backward Design for Learning and Language Development

UbD embraces the notion of backward planning, where designers begin with the end goals in mind and design instruction to supports learners' progress toward those goals (Wiggins & McTighe, 2011). With planning typically focused on the unit level, UbD provides a three-stage design process guided by a planning template to mediate practitioners' thinking as they flesh out the original curriculum. Backward

design for learning *and* language development maintains the components of UbD design by weaving in the focus on language across existing stages. With this approach, the existing UbD framework and template remains the same, with the language lens integrated throughout to plan instruction that is culturally and linguistically responsive to the students in the classroom (Gay, 2010; Lucas et al., 2008). We discuss the design of the UbD framework for learning and language development below.

Pre-Planning

Responsive practice necessitates starting with students in classrooms, including consideration of collective and individual backgrounds, abilities, strengths, and needs (Gay, 2010; Herrera, 2016; Lucas et al., 2008). The pre-planning stage emphasizes the importance of recognizing the rich diversity and assets that students bring to classroom learning. Aligned with previous work in disciplinary teaching and learning, this approach is based on the premise that learners' cultural and linguistic backgrounds influence how they learn and engage with mathematics (e.g., Bishop, 1988; Gutiérrez, 2002; Leonard et al., 2010; Nasir et al., 2008). With the language lens on UbD, practitioners (a) recognize students' language backgrounds and cultural background knowledge as resources for learning and (b) use multiple forms of formal and anecdotal data to understand the holistic nature of students' learning and language development (Heineke & McTighe, 2018).

Stage One

Central to the notion of backward design, Stage One of UbD begins instructional design by identifying the desired results for students' learning and understanding at the end of the unit of study (Wiggins & McTighe, 2005). Aligned to *established goals*, such as the Common Core Standards, practitioners first define the instructional goals for transfer, meaning, and acquisition. *Transfer goals* pinpoint how students will autonomously transfer and use learning beyond the math unit. *Meaning goals* consider the big ideas and understandings that students will develop and deepen as they grapple with essential questions around disciplinary concepts, principles, and processes. *Acquisition goals* focus on related knowledge and skills, which serve as building blocks for students to achieve larger transfer and meaning goals.

When adding a language lens on Stage One, the goal is to maintain the rigor of the unit while targeting language development. In this way, the unit's transfer and meaning goals – those big ideas centered on integral disciplinary concepts and processes – stay the same. The key steps in Stage One with a language lens are (a) analyzing the language needed to achieve these greater goals for learning and understanding and (b) targeting the development of this pertinent language by drafting language-focused acquisition goals. *Knowledge indicators* target academic language features, including words (e.g., vocabulary terms, multiple meaning words), sentences (e.g., grammatical constructions, sentence stems), and texts (e.g., text features and structures). *Skill indicators* specify the central language functions (e.g., explain, compare, evaluate) across the four language domains (i.e., listening, speaking, reading, writing).

Stage Two

Following the identification of desired results in Stage One, Stage Two of UbD involves integrating assessments across units of study for students to demonstrate their ongoing learning, understanding, and achievement as aligned to unit goals. *Performance tasks* are central to the UbD framework, as

they prompt students to engage in authentic situations that require transfer of disciplinary learning to real-world problems and practices (Wiggins & McTighe, 2005). Students take on particular roles (e.g., mathematician, engineer, and small business owner) and use understandings of concepts and processes in simulated situations aligned to the unit of study. In addition to performance tasks, *supplementary evidence* is collected in various forms across units to glean important information on students' progress; this includes formal measures integrated into units of study such as tests, quizzes, and academic prompts.

The language lens on Stage Two centers on designing assessments that (a) capture data on both disciplinary learning and language development and (b) provide equitable access for all students to demonstrate progress toward unit goals. *Performance tasks* allow teachers to integrate language via authentic, collaborative, and language-rich experiences that involve multiple language functions and domains. To ensure all students can actively participate, assessment tasks and tools should be culturally responsive and linguistically accessible; in other words, we want to evaluate students' learning and progress toward unit goals, not their cultural background knowledge or language proficiency. This begins by considering the background knowledge needed to take part in the simulated situation, which typically prompts students to transfer their learning in a novel role and context. The integration of differentiated linguistic supports further fosters students' active participation in assessments, including tools like graphic organizers, bilingual dictionaries, visuals, and strategic groups (Heineke & McTighe, 2018).

Stage Three

Stage Thee of UbD involves designing instruction that authentically facilitates students' learning and understanding as aligned to Stage One goals and Stage Two assessments (Wiggins & McTighe, 2005). The *learning plan* includes strategically sequenced, hands-on experiences with real-world application and differentiation based on students' backgrounds, abilities, strengths, and needs. *Formative assessments* are embedded to collect data on students' progress across the unit of study (Wiggins & McTighe, 2011).

When adding the language lens, the goal is to design instruction that promotes language development and provides equitable access to learning. Through strategic incorporation of collaborative, cognitively demanding tasks and complex, culturally relevant texts, teachers target the disciplinary language functions and features prioritized in Stage One. When designing tasks, teachers provide differentiated scaffolds to support active participation, such as word banks and sentence frames. When using complex texts, teachers add scaffolds like marginal notes or modified fonts to call attention to demanding disciplinary language (Walqui & van Lier, 2010). Stage Three also involves tapping into students' cultural and linguistic background knowledge as resources for learning (Herrera, 2016; Moll & González, 1997), including the use of students' home languages in instruction regardless of the primary language of the classroom or teacher (Collier & Thomas, 2007). By leveraging students' rich assets and resources in Stage Three, teachers use thoughtful and purposeful curricular design with the UbD template to springboard progress toward Stage One learning goals (Heineke & McTighe, 2018).

Preparing Practitioners to Support Language via Understanding by Design®

Designing and refining the UbD framework with a lens on language was the first step to this work. By using the existing instructional design approach and template already being implemented by teachers, the Language Matters team promoted holistic efforts in partner schools where EL education was not siloed with its own approach to instructional design such as SIOP (Echevarria et al., 2013). Additionally,

drawing from the rich traditions of UbD to center on inquiry and the development of in-depth conceptual understandings over discrete skills, this approach pushed back on prolific tendencies in the field that had endured for decades. Nonetheless, the work to integrate a language lens into the UbD template was only the first step. The next step involved building capacity for educators to use the template to design curriculum and instruction for ELs that maintained grade-level and disciplinary rigor while supporting language development and tapping into rich cultural and linguistic resources for learning. Those efforts are described in this sub-section.

This sub-section tackles two objectives. First, thick description of the work provides readers with an in-depth understanding of the professional development efforts, including the key levers that mediate teacher learning. Note that these key levers have emerged from empirical findings from both internal and external evaluations (Heineke et al., 2018). Second, the narrative explores the professional development of one teacher to exemplify the processes and outcomes of the professional development efforts. Author Luke Carman taught seventh and eighth grade mathematics at Walton Multicultural Academy (WMA; pseudonym), a partner school within one region of the city with significant cultural and linguistic diversity among its student population. This chapter's focus on middle-school mathematics was strategic to highlight two underexplored areas of EL teacher professional development.

Pre-Planning to Focus on Students

The pre-planning stage grounded curricular design in the unique context of the school and community, specifically focusing on the unique and diverse nuances of students. The addition of this preliminary step preceding the three existing stages of instructional design aimed to add an explicit lens on culturally and linguistically responsive practice (Gay, 2018; Lucas et al., 2008). In other words, the Language Matters team did not want practitioners to plan generic instruction for any classroom but instead include specific lenses on their learners' rich cultural and linguistic background knowledge (Herrera, 2016; Moll & González, 1997). In capacity building efforts in schools, this meant attempting to develop educators' understandings of the heterogeneity within the homogenous label of EL.

To reach these goals, the professional development series began with teachers reviewing and analyzing data from their schools. School leaders amassed relevant macro-level data sources in line with the above-described goals, including data from home language surveys, standardized tests of language proficiency (e.g., WIDA's ACCESS test), and standardized test scores in the content areas disaggregated by EL label. Educators explored the data to glean realizations about the many languages used by children in homes, various language competencies by domain, and subsequent influences on academic performance as measured by standardized tests. In addition to these macro-level data spanning the school, teachers brought formal and anecdotal data on students in their classrooms to add more nuance to the conversation. Using a tool called a holistic student profile (Heineke & McTighe, 2018), teachers document the assets of individual learners, including sources of background knowledge, language preferences and abilities, and mathematical self-efficacy (Collier & Thomas, 2007; Herrera, 2016). Across these data analyses, facilitators consistently (a) reinforced the strengths and resources of learners and (b) previewed how to conduct responsive instruction with the UbD framework.

Luke and his middle-school colleagues on the WMA team recognized that the diversity of their school. Situated in one of the most diverse neighborhoods of the urban metropolis, they were broadly aware of the multilingual and multiethnic nature of their workplace. But at the middle-school level, many students speak with relatively strong proficiency in English, which often skewed adults' perceptions.

Drawing from home language survey data, Luke and his team discovered that an impressive 90% of the 300 students who attend WMA spoke a language other than English at home, with representation of 16 different languages. 72% of students were Spanish dominant, with families coming from various locales across Central America, South America, Mexico, and the Caribbean, meaning that learners potentially spoke different varieties and dialects of Spanish. Luke was interested to learn that 16% of students were labeled as ELs per standardized test scores of listening, speaking, reading, and writing, which included both newcomers to the United States and long-term ELs who had attended the neighboring elementary school since kindergarten. He found that many of his students were previously labeled as ELs but had tested out of the label prior to coming to WMA.

Defining Goals in Stage One

The language lens on Stage One of UbD uncovered practitioners' linguistic blind spots regarding the language demands inherent in disciplinary curriculum. As experts in their content areas, as well as many also being English-dominant, teachers have not consistently recognized that the language used for teaching and learning might need particular attention to allow learners to deeply engage with the content. By adding the language lens in Stage One, framework authors endeavored to place language at the forefront of curriculum designers' minds, rather than save this as an afterthought for the end of instructional planning. To accomplish this, professional development efforts aimed for educators to analyze and pinpoint discipline-specific language functions and features at the word, sentence, and discourse levels to target language development in units of study (WIDA, 2012).

Professional development efforts committed substantial time to delving into the nuances of disciplinary language. Based on data collection from partner schools, the Language Matters team knew that teachers reported using EL instructional strategies without awareness of the language demands for which they were scaffolding (Heineke et al., 2018). Recognizing practitioners as content experts in their respective disciplines, as well as pedagogical content experts in disciplinary teaching methods (Shulman, 1986), facilitators endeavored to add linguistic expertise to educators' repertoires of practice. Buy-in emerged as an integral lever, specifically encouraging teachers to take the perspective of ELs in why language might be demanding. To build empathy with learners' experiences with demanding language, facilitators used complex scholarly journal articles from the university library and prompted participants to read and use the text to engage in learning. The collaborative reflection after the simulation provided a segue to deconstruct linguistic blind spots, getting teachers to think critically about the complexity of disciplinary language in their curriculum. Tools to analyze language features and functions (Assessment and Accountability Comprehensive Center at WestEd [AACCW], 2010; WIDA, 2012), as well as examples from each of the major disciplines, provided teachers with guidance to probe the demands specific to their content areas, classrooms, and students.

Following these simulations, Luke worked on a unit of study from his eighth-grade algebra class. He had already drafted the unit in collaboration with his departmental colleagues and EL and special education co-teachers and endeavored to add the language lens as a part of the professional development series. Luke was steadfast in his desire for all students to meet the Common Core mathematics standards, as well as the aligned transfer and meaning goals focused on selecting and using varied and effective strategies for dynamic and flexible problem solving. Teaching in a multilingual community, he already recognized the importance of language in math teaching and learning; however, the facilitator's guided practice supported his analysis of potential language demands. Using the graphic organizers on

language functions and features (AACCW, 2010; WIDA, 2012), he pinpointed the pertinent linguistic knowledge and skills for the unit. Knowledge indicators included vocabulary (e.g., slope, intercept, coefficient), words used in new ways (e.g., intersection, cancellation), lexical bundles (e.g., dependent variable, inverse operations), use/reference of variables, comparative sentence structures, and sequential directions. Skill indicators focused on language functions tied to cognitive processes including (a) *translating* between algebraic and standard forms, (b) *comparing* lines with varying equations, and (c) *explaining* appropriate methods for finding the system of equations.

Developing Assessments in Stage Two

The language lens on Stage Two developed authentic and appropriate ways to evaluate students' progress toward goals while ensuring equitable access for ELs. Teachers have often learned to develop or select assessment tools in line with content knowledge rather than students' language abilities and cultural background knowledge. Preceding the development of sound assessments for units, the sub-goal emerged to develop educators' criticality around traditional tests of student learning, building on previous empathy-building activities to recognize how ELs may not have equitable opportunities to demonstrate their abilities and understandings. Then, sessions shifted to providing teachers with alternatives to assess learners with authentic performance tasks that aligned to Stage One goals for disciplinary learning and language development. In capacity building efforts, this meant modeling and guided practice in designing performance tasks in response to unique students in classrooms.

Sessions on Stage Two commenced with buy-in and awareness in advance of application to instructional design. Teachers critically analyzed traditional testing tools for linguistic and cultural bias, prompting considerations of how to assess disciplinary knowledge and skills without requiring advanced language proficiency or requisite background knowledge. Facilitators then introduced the concept of performance tasks, tapping into participants' prior knowledge of project-based learning and authentic classroom assessments. Teachers explored language-rich performance tasks as alternatives to glean data on students' learning and language development, specifically probing ideas for oral (e.g., podcast, roleplay), written (e.g., blog, proposal), and displayed tasks (e.g., blueprint, website). The GRASPS format from the UbD framework guided teachers in fleshing out performance tasks to facilitate learners' transfer to novel contexts outside the classroom, including the task goal, role, audience, situation, product or performance, and standards and criteria for success (Wiggins & McTighe, 2005). Facilitators added the language lens to prompt considerations of background knowledge and language proficiency to ensure tasks accessible for all learners (Heineke et al., 2018). Finally, the session connected back to tools from the WIDA Consortium (WIDA, 2007, 2016) to incorporate developmentally appropriate language functions from Can-do descriptors and differentiated supports via graphic, sensory, and interactive scaffolds into assessment tasks, tools, and rubrics.

Through participation in professional development, Luke analyzed word problems in his existing curriculum. Finding bias in the traditional test items, he developed a rubric to evaluate the cultural relevance for his students, specifically probing the people, places, and problems presented (see Heineke & McTighe, 2018). Luke then worked collaboratively with his colleagues to create a GRASPS task for the focal unit of study that tapped into students' prior knowledge of jobs held by family and community members, as well as notions of making money tied to revenue and expenses. The WPA team wanted students to apply understandings about systems of equation to real-world problems using the four domains of language as they engaged in problem solving, drafted scripts for career counseling, and performed oral presentation.

In line with the UbD 2.0 template (Wiggins & McTighe, 2011), they identified evaluative criteria for the assessment task that directly aligned to Stage 1 goals (e.g., real-world career, graphic representation, accurate algebraic solution, math-based argument, and math language) and then fleshed out the task rubric. With guidance from the facilitator and support from the EL teacher on the WPA team, Luke and his team integrated language across the content-focused rubric, including foci on word, sentence, and discourse features of mathematical language.

Planning Instruction in Stage Three

The final focus of the professional development series, the language lens on Stage Three supported educators in selecting aligned and appropriate methods, strategies, and resources for students to reach Stage One goals. Tapping into educators' background knowledge of EL instructional strategies, session goals centered on participants fleshing out meaningful and authentic learning trajectories with language-rich activities and scaffolds. Grounded in the tenets of culturally and linguistically responsive practice, this meant reinforcing the importance of strategically selecting and organizing instructional approaches in the UbD template in response to the backgrounds, competencies, and preferences of the students in the classroom (Gay, 2018; Herrera, 2016; Lucas et al., 2008) to foster progress toward learning goals.

Language Matters team members closed by focusing on Stage Three with a language lens. Drawing from preliminary data collected at partner schools, facilitators knew that participants felt most confident with the focus on instruction, in contrast to previous foci on goals and assessments (Heineke et al., 2018). Educators described previous coursework and professional development focused on EL instructional strategies, such as incorporating visuals, teaching vocabulary terms, and strategically grouping students. Nonetheless, findings indicated the need to emphasize not using a strategy for strategy's sake but instead strategically selecting instructional approaches based on the unique students and predefined goals for learning and language development. In this way, facilitators returned to earlier session foci on students (e.g., language backgrounds and proficiency levels) and goals (e.g., language functions and features) to model and guide practitioners in selecting and organizing learning events and materials in response to students and goals. With their own students and learning goals in mind, participants explored research-based approaches and resources for EL instruction, such as bilingual and home-language resources, amplification of complex texts, and culturally relevant materials.

Luke and his colleagues collaboratively approached Stage Three design with a language lens, working under the guidance of the facilitator and contributing various areas of expertise to the learning plan, including mathematics, EL, and special education. They began the unit by using word-based prompts to tap into prior knowledge and preview disciplinary vocabulary like slope, intercept, and coefficient. Across the unit, they ensured various contexts of learning (e.g., modeling, application, discussion) and targeted strategies that prompted all language domains (e.g., inquiry groups, send-a-problem). Among these instructional events, they found ways to purposefully incorporate students' linguistic backgrounds to support learning, such as grouping students by home language to allow for bilingual interaction. They also extended learning to homes and communities, prompting students to glean insight and information from parents and community members. To collect evidence of students' learning to inform instruction, Luke integrated formative assessments of language development, including artifacts (e.g., personal word walls of math terms) and observations of mathematical language using developmental rubrics designed from Can-do descriptors (WIDA, 2016).

SOLUTIONS AND RECOMMENDATIONS

This chapter shares one approach to shifting practice in schools to promote equity and inclusion for students labeled as ELs. Anyone who has spent time in the classroom can attest to the fact that teaching is highly complex practice. EL education exacerbates this complexity, given that students situated within this homogenous label come to school with various languages and language varieties, varying competencies and abilities, unique cultural practices and background knowledge, and diverse experiences in homes, communities, and schools (Herrera, 2016). Students spanning grade levels engage with literacy and disciplinary learning while bringing their rich and varied funds of knowledge to make sense of the curriculum (Moll & González, 1997. In this way, the target audience is different in every classroom with learners of different ages, developmental levels, competencies, home languages, cultural practices, interests, and identities. Many approaches to teaching attempt to simplify this complexity, such as assigning labels to students (e.g., ELs) or providing lists of instructional strategies (e.g., think-pair-share). Transforming education for this population involves disrupting traditional approaches that segregate students apart from peers and lower expectations for disciplinary learning and language, as well as embracing that there is no one-size-fits-all approach. Expertise must be developed among educators and stakeholders, which is explored in this section.

Complex Professional Learning Grounded in Existing Practice

Various frameworks have been developed to support teacher educators, administrators, and professional development providers in pinpointing the expertise that general education teachers need to infuse a language lens into their daily practice. Lucas and colleagues (2008) coined the term linguistically responsive practice and designated various *understandings* about language and language development, paired with related *pedagogical practices* for teachers to enact in classrooms with learners. Part of the work of the Understanding Language group, Santos and colleagues (2012) defined a four-part framework for teachers to understand *language progressions* (i.e., how language develops) and *language demands* (i.e., discipline-specific language functions and features) as a means to strategically design instruction that incorporates *language scaffolds* (i.e., curricula designed with language lens) and *language supports* (i.e., responding to individual needs in instruction). The Language Matters project tapped into these frameworks, as well as others that provide the crucial lens on cultural heterogeneity and responsiveness (Gay, 2010; Herrera, 2016), to ground the trajectory of practical professional development in solid theory and research from leading experts in the field.

By tapping into existing frameworks regarding teacher expertise for ELs, professional development providers can design holistic learning experiences for practitioners to develop pertinent understandings and practices. Findings from the Language Matters project indicated a preliminary step prior to focus on understandings and practices: building buy-in, empathy, and general awareness (Heineke et al., 2018). Disciplinary teachers focus on teaching their disciplines, which means that lenses on ELs and language may be considered as someone else's role and responsibility (Feiman-Nemser, 2018). These silos are engrained in our educational institution and require disruption, specifically about the role of language in disciplinary learning and the responsibility of teachers in attending to language in disciplinary instruction. Simulations can prompt empathy with ELs in disciplinary classrooms, putting teachers in situations that make them realize the need to focus on language in content-area instruction, such as the scholarly article activity described above in the professional development session related to Stage One.

Not only should disciplinary teachers recognize the impact of their actions and expectations on learners, but they must also disrupt the common tendency to assume that deficits among ELs results in lack of student engagement and understanding (e.g., Clark & Peterson, 1986; Haneda, 2014; Hopkins et al., 2019; Pajares, 1996; Penfield, 1987).

Building teachers' buy-in, understandings, and practices is central to professional development efforts but means nothing if this expertise does not meaningfully transfer into work with students. Perhaps the most significant decision in the Language Matters project was attaching professional learning to the UbD framework and template being used in partner schools (Heineke et al., 2018). This meant that teachers were not learning or being expected to do something in addition, subsequently situating ELs as an add-on to expected daily practice that only certain teachers needed to do (Gibbons, 2009). Participants in the Language Matters professional development series developed understandings and practices around language progressions, demands, scaffolds, and supports (Lucas et al., 2008; Santos et al., 2012) with direct integration and application to disciplinary instructional design with the UbD framework. For example, the pre-planning stage centered on students' cultural backgrounds and language progressions. Stage One delved in language demands, whereas Stages Two and Three probed appropriate scaffolds and supports within assessment and instruction. Teachers then designed curriculum grounded in unique schools and students, applying their developing expertise in the context of different disciplines and classrooms.

By attaching EL expertise to existing curricular design frameworks used in schools, efforts can disrupt traditional silos between EL and content teachers, as well as encourage thoughtful curriculum and instruction that attends to language development for all learners. In this project, UbD with a language lens supported teachers in designing instruction rigorous, authentic, and responsive to students' diverse backgrounds, abilities, strengths, and needs (Heineke & McTighe, 2018). Research showed the efficacy of this approach, as teachers drafted and enacted curricula that explicitly targeted language and incorporated learners' unique resources like home language materials and culturally responsive texts (Heineke et al., 2018). Whether using UbD or another approach, adding a *language lens* on existing instructional practice centers on maintaining grade-level expectations for learning while using language to enhance instruction and provide equitable access for ELs. With growing linguistic diversity and enhanced focus on language through CCSS and other standards, the language lens on curricular design can equip teachers to promote equity and inclusion in disciplinary classrooms.

Collaboration Across Stakeholders in Schools

In addition to focal components of professional development, the process of capacity building efforts – centered on collaboration across stakeholders – emerges as integral (Heineke et al., 2018). This chapter has provided narrative description of Luke and his middle-school colleagues learning alongside of each other and tapping into their own expertise to support professional growth and curricular design. In Language Matters sessions, teachers co-plan and eventually co-teach curriculum across content areas, ESL, and special education to reinforce the mindset of inclusive and responsive practices, where language development is the job of all teachers and can be accomplished spanning classroom contexts at the school. The UbD framework (Wiggins & McTighe, 2005, 2011) served as the common tool to facilitate teachers' collaborative learning and application. Part of the larger empirical findings regarding the efficacy of the Language Matters project, teachers shared that UbD with a language lens served as integral to developing their understandings around language and ELs, as well as promoting collaboration

across educators within and across schools as they designed and shared units of study using the same framework (Heineke et al., 2018).

Whereas this chapter situates teachers' professional development as the focal component of capacity building efforts, it is important to emphasize the role of school and district leaders. In Language Matters programming, regional directors, principals, assistant principals, and instructional coaches participated in workshops alongside teachers on the school- and community-based teams, as well as engaged in sessions with one another apart from teachers focused on broader structures and systems for ELs in schools. The consistent inclusion of leaders proved detrimental to project efforts to (a) develop awareness, understandings, and practices for working with students labeled as ELs, (b) promote curricular design efforts holistically across the school between professional development sessions, and (c) apply deepening expertise to school- and district-level programming and decision-making. Leaders described the focus on UbD as the key lever to both applicability and sustainability, as teachers integrated language development and inclusive practices into the curricular design work already being done by the school and district (Heineke et al., 2018). They then worked to facilitate co-planning and co-teaching to allow teachers to implement units in meaningful ways in classrooms with students.

But administrators are not the only leaders capable of influencing larger change for ELs in schools. Research on the Language Matters project also confirmed the integral role of teacher leaders, specifically those who enrolled in the graduate program at the university in addition to the professional development series described above (Heineke et al., 2018). With participants' tuition at the private university partially funded by the grant, the Language Matters cohort allowed educators to earn their ESL endorsement with the option to continue coursework for a full Master's degree in EL education. Teachers and instructional coaches from across partner schools came together two nights per week for three semesters to develop more in-depth expertise beyond the content tackled in a four-day professional development series. Luke participated in the cohort as the representative from WMA, which deepened his overall understandings, practices, and leadership around curricular planning and teaching ELs. Through these multifaceted capacity building efforts, multiple stakeholders developed expertise and commitment to enhancing the education of students labeled as ELs.

FUTURE RESEARCH DIRECTIONS

This project aimed to develop and implement an actionable and flexible approach for schools to enact the conceptual suggestions from the esteemed scholars in Stanford's Understanding Language work group (e.g., Bunch, 2013; Moschkovich, 2013; Santos et al., 2013; van Lier & Walqui, 2012). The project described in this chapter took one approach in one unique urban context in the Midwestern United States with more work no doubt occurring in different iterations and settings around the nation. Whereas the authors of this chapter drew from case-specific findings from Language Matters, future research can probe efforts in other contexts to develop generalizable findings on how to enact change in schools to holistically support teachers' professional development and students' language development. Researchers might probe efforts to deepen expertise with pre-service and in-service teachers in urban, suburban, and rural contexts with varying populations of ELs. The authors also recommend prioritizing data collection on students' learning and language development over time to determine how the professional development efforts transfer to impact student learning; however, this requires the collaborative

removal of barriers between university and school partners to allow access to the needed data to make this important connection between teacher and student learning.

CONCLUSION

The education of students labeled as ELs has a storied history in the United States, where the emphasis on rapid English language acquisition has tended to decrease opportunities for children and adolescents to engage with grade-level content curriculum in K-12 schools (García & Kleifgen, 2010). In attempts to comply with federal and state policies, schools often designate specific educators in the building who maintain responsibility for teaching ELs, subsequently siloing efforts to support language development apart from disciplinary curriculum (Oakes et al., 2013). In addition to ESL teachers, schools might offer special sections of disciplinary courses for ELs, often referred to as sheltered instruction, which focus on discrete skills and content-specific vocabulary (Crawford & Reyes, 2015). While their English-proficient peers in general education sections engage in content-specific inquiry to develop conceptual understandings, ELs receive simplified curricula with lowered expectations for both disciplinary learning and related language usage (Gibbons, 2009).

The approach detailed in this chapter builds from previous attempts to merge content and language in disciplinary classrooms (e.g., Commins & Miramontes, 2006; Echevarria et al., 2013; Lucas et al., 2008) to demolish the siloes and maintain high expectations and rigorous instruction for ELs across the school curriculum. The focus on disciplinary instruction, exemplified in this chapter by the design of the mathematics curriculum for one urban middle school, rests on the premise that learners should have access to rigorous, grade-level content-area instruction while development English language proficiency. In this way, all teachers – not just those teaching designated ESL or sheltered courses – integrate purposeful language scaffolding into their curricular design to (a) holistically support students' language development, (b) maintain high expectations for ELs, and (c) provide equitable access to the grade-level curriculum. This all-hands-on-deck approach involves multiple stakeholders to provide a robust educational infrastructure promoting both equity and inclusion for students labeled as ELs.

REFERENCES

Alexander, D., & Nava, A. (1977). *The how, what, where, when and why of bilingual education: A concise and objective guide for school district planning*. R & E Research Associates.

Assessment and Accountability Comprehensive Center at WestEd (AACCW). (2010). *Language for achievement: A framework for academic English language* [Handout]. WestEd.

Bishop, A. J. (1988). Mathematics education in its cultural context. *Educational Studies in Mathematics*, *19*(2), 179–191. doi:10.1007/BF00751231

Bunch, G. C. (2013). Pedagogical language knowledge: Preparing mainstream teachers for English learners in the new standards era. *Review of Research in Education*, *37*(1), 298–341. doi:10.3102/0091732X12461772

Cardenas, J. A. (1976). *Lau remedies outlined.* Retrieved from https://eric.ed.gov/?id=ED125148

Castañeda v. Pickard, 648 F.2d 989 (5th Cir. 1981).

Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 255–296). MacMillan.

Cochran-Smith, M., & Zeichner, K. (Eds.). (2005). *Studying teacher education: The report of the AERA Panel on Research and Teacher Education*. Lawrence Erlbaum.

Collier, V. P., & Thomas, W. P. (2007). Predicting second language academic success in English using the prism model. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching, Part 1* (pp. 333–348). Springer., doi:10.1007/978-0-387-46301-8_24

Commins, N. L., & Miramontes, O. B. (2006). Addressing linguistic diversity from the outset. *Journal of Teacher Education*, *57*(3), 240–246. doi:10.1177/0022487105285591

Crawford, J. (2000). *A war with diversity*. Multilingual Matters., doi:10.21832/9781853596766

Crawford, J., & Reyes, S. A. (2015). *The trouble with SIOP®: How a Behaviorist framework, flawed research, and clever marketing have come to define - and diminish -sheltered instruction*. Institute for Language & Education Policy.

Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. Jossey Bass.

de Jong, E. J. (2011). *Foundations for multilingualism in education from principles to practice*. Caslon Publishing.

Dicker, S. J. (2003). *Language in America: A pluralist view* (2nd ed.). Multilingual Matters. doi:10.21832/9781853596537

Dover, A. G., & Rodríguez-Valls, F. (2018). Learning to "brave up": Collaboration, agency, and authority in multicultural, multilingual, and radically inclusive classrooms. *International Journal of Multicultural Education*, *20*(3), 59–79. doi:10.18251/ijme.v20i3.1670

Echevarría, J., & Short, D. J. (2011). *The SIOP Model: A Professional Development Framework for a Comprehensive School-Wide Intervention. CREATE Brief*. Center for Research on the Educational Achievement and Teaching of English Language Learners.

Echevarria, J., Vogt, M. E., & Short, D. J. (2013). *Making content comprehensible for English learners. The SIOP® model* (4th ed.). Pearson.

Feiman-Nemser, S. (2018). What does research tell us about educating mainstream teachers to work with ELLs? *The Educational Forum*, *82*(2), 227–234. doi:10.1080/00131725.2018.1420872

Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English language learners: A survey of California teachers' challenges, experiences, and professional development needs*. Retrieved from https://escholarship.org/uc/item/6430628z

García, E., Arias, M. B., Harris Murri, N. J., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, *61*(1-2), 132–142. doi:10.1177/0022487109347878

García, O., & Kleifgen, J. A. (2010). *Educating emergent bilinguals: Policies, programs, and practices for English language learners*. Teachers College Press.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). Teachers College Press.

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.

Genesee, F., Lindholm-Leary, K., Christian, D., Saunders, W., & Saunders, B. (Eds.). (2006). *Educating English language learners: A synthesis of research evidence*. Cambridge University Press. doi:10.1017/CBO9780511499913

Gibbons, P. (2009). *English learners, academic literacy, and thinking: Learning in the challenge zone*. Heinemann.

Gutiérrez, R. (2002). Beyond essentialism: The complexity of language in teaching mathematics to Latina/o students. *American Educational Research Journal*, *39*(4), 1047–1088. doi:10.3102/00028312039004 1047

Haneda, M. (2014). From academic language to academic communication: Building on English learners' resources. *Linguistics and Education*, *26*, 126–135. doi:10.1016/j.linged.2014.01.004

Harper, C., & de Jong, E. D. (2004). Misconceptions about teaching English language learners. *Journal of Adolescent & Adult Literacy*, *48*(2), 152–162. doi:10.1598/JAAL.48.2.6

Heineke, A. J., & Giatsou, E. (2020). Learning from students, teachers, and schools: Examining the efficacy of field-based teacher education for emergent bilinguals. *Journal of Teacher Education*, *71*(1), 148–161. doi:10.1177/0022487119877373

Heineke, A. J., & McTighe, J. (2018). *Using Understanding by Design in the culturally and linguistically diverse classroom*. ASCD.

Heineke, A. J., Papola-Ellis, A., Davin, K. J., Cohen, S., Roudebush, A., Wright-Costello, B., & Fendt, C. (2018). Language matters: Developing educators' expertise for English learners in linguistically diverse communities. *Language, Culture and Curriculum*, *32*(1), 63–77. doi:10.1080/07908318.2018.1493493

Herrera, S. G. (2016). *Biography-driven culturally responsive teaching* (2nd ed.). Teachers College Press.

Hopkins, M., Gluckman, M., & Vahdani, T. (2019). Emergent change: A network analysis of elementary teachers' learning about English Learner instruction. *American Educational Research Journal*, *56*(6), 2295–2332. doi:10.3102/0002831219840352

Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, *34*(3), 159–165. doi:10.1080/00405849509543675

Leonard, J., Brooks, W., Barnes-Johnson, J., & Berry, R. Q. III. (2010). The nuances and complexities of teaching mathematics for cultural relevance and social justice. *Journal of Teacher Education*, *61*(3), 261–270. doi:10.1177/0022487109359927

Linquanti, R., & Cook, H. G. (2013). *Toward a "common definition of English learner": Guidance for states and state assessment consortia in defining and addressing policy and technical issues and options*. Council of Chief State School Officers.

Lucas, T., & Grinberg, J. (2008). Responding to the linguistic reality of mainstream classrooms: Preparing all teachers to teach English language learners. In M. Cochran-Smith, S. Feiman-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 606–636). Routledge.

Lucas, T., Villegas, A. M., & Freedson-González, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, *59*(4), 361–373. doi:10.1177/0022487108322110

Lyons, J. J. (1995). The past and future directions of federal bilingual-education policy. In O. García & C. Baker (Eds.), *Policy and practice in bilingual education: A reader extending the foundations* (pp. 1–14). Multilingual Matters. doi:10.1177/0002716290508001007

Moll, L. C., & González, N. (1997). Teachers as social scientists: Learning about culture from household research. In P. Hall (Ed.), Race, ethnicity, and multiculturalism (Vol. 1, p. 890114). Academic Press.

Moschkovich, J. (2013). Principles and guidelines for equitable mathematics teaching practices and materials for English language learners. *Journal of Urban Mathematics Education*, *6*(1), 45–57. doi:10.21423/jume-v6i1a204

Nasir, N. S., Hand, V., & Taylor, E. V. (2008). Culture and mathematics in school: Boundaries between "cultural" and "domain" knowledge in the mathematics classroom and beyond. *Review of Research in Education*, *32*(1), 187–240. doi:10.3102/0091732X07308962

National Center for Education Statistics. (2021). *English language learners in public schools*. Retrieved from https://nces.ed.gov/programs/coe/indicator/cgf

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common Core State Standards*. Retrieved from http://www.corestandards.org/

National Research Council. (2013). *Next-generation science standards: For states, by states*. The National Academies Press. doi:10.17226/18290

Oakes, J., Lipton, M., Anderson, L., & Stillman, J. (2013). *Teaching to change the world*. Paradigm.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543–578. doi:10.3102/00346543066004543

Penfield, J. (1987). ESL: The regular classroom teacher's perspective. *TESOL Quarterly*, *21*(1), 21–39. doi:10.2307/3586353

Plough, B., & Garcia, R. (2015). Whole school English learner reform: A heuristic approach to professional learning in middle schools. *Planning and Changing*, *46*(1-2), 21–41. https://eric.ed.gov/?id=EJ1145484

Public Law 90-247 of 1968, Title VII, Bilingual Education Programs, § Section 701-707. (1968). https://www.govinfo.gov/content/pkg/STATUTE-81/pdf/STATUTE-81-Pg783.pdf

Punches, M. W. (1985). The shaping of a social policy: The bilingual education act, 1968-1984. *Journal of Thought*, *20*(4), 62–70. https://www.jstor.org/stable/42589123

Russell, F. A. (2014). Collaborative literacy work in a high school: Enhancing teacher capacity for English learner instruction in the mainstream. *International Journal of Inclusive Education*, *18*(11), 1189–1207. doi:10.1080/13603116.2014.884642

Samway, K., & McKeon, D. (2007). *Myths and realities: Best practices for English language learners* (2nd ed.). Heinemann.

Santos, M., Darling-Hammond, L., & Cheuk, T. (2012). Teacher development to support English language learners in the context of common core state standards. In *Understanding Language Conference*. Stanford University. Retrieved from https://ell.stanford.edu/sites/default/files/pdf/academic-papers/10-Santos%20LDH%20Teacher%20Development%20FINAL.pdf

Short, D. J., Echevarría, J., & Richards-Tutor, C. (2011). Research on academic literacy development in sheltered instruction classrooms. *Language Teaching Research*, *15*(3), 363–380. doi:10.1177/1362168811401155

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4–14. doi:10.3102/0013189X015002004

Silzer, R. F., & Parson, C. (2015). Key practitioner issues and recommendations for future SIOP action. *The Industrial-Organizational Psychologist*, *53*(2), 32–46.

Stanford Center for Assessment, Learning, and Equity. (2018). *edTPA: Making good choices*. Retrieved from https://www.edtpa.com/Content/Docs/edTPAMGC.pdf

van Lier, L., & Walqui, A. (2012). Language and the common core state standards. *Commissioned Papers on Language and Literacy Issues in the Common Core State Standards and Next Generation Science Standards*, *94*, 44–51.

Villavicencio, A., Jaffe-Walter, R., & Klevan, S. (2021). "You can't close your door here:" Leveraging teacher collaboration to improve outcomes for immigrant English Learners. *Teaching and Teacher Education*, *97*, 103227. doi:10.1016/j.tate.2020.103227

Walqui, A., & van Lier, L. (2010). *Scaffolding the academic success of adolescent English language learners: A pedagogy of promise*. WestEd.

WIDA. (2007). *English language proficiency standards and resource guide*. Madison, WI: Author. Retrieved from https://wida.wisc.edu/sites/default/files/resource/2007-ELPS-Resource-Guide.pdf

WIDA. (2012). *Amplification of the English language development standards: Kindergarten–grade 12*. Madison, WI: Author. Retrieved from https://www.wida.us/get.aspx?id=540

WIDA. (2016). *Can-do descriptors: Key uses edition, grades K–12*. Author. Retrieved from https://www.wida.us/get.aspx?id=2043

Wiggins, G., & McTighe, J. (2005). *Understanding by design*. ASCD.

Wiggins, G., & McTighe, J. (2011). *The understanding by design guide to creating high-quality units*. ASCD.

Woolard, K. A. (1989). Sentences in the language prison: The rhetorical structuring of an American language policy debate. *American Ethnologist*, *16*(2), 268–278. doi:10.1525/ae.1989.16.2.02a00050

Yarborough, R. W. (1967). *Bilingual education: In hearings before the United States senate committee on labor and public welfare, special subcommittee on bilingual education, ninetieth congress* (1st ed.). G.P.O.

Yell, M. (2013). Elementary and secondary education Act (ESEA). In C. R. Reynolds, K. J. Vannest, & E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals*. doi:10.1002/9781118660584.ese0831

ADDITIONAL READING

Coady, M. R., Harper, C., & De Jong, E. J. (2016). Aiming for equity: Preparing mainstream teachers for inclusion or inclusive classrooms? *TESOL Quarterly*, *50*(2), 340–368. doi:10.1002/tesq.223

García, O., & Kleifgen, J. A. (2018). *Educating emergent bilinguals: Policies, programs, and practices for English learners* (2nd ed.). Teachers College Press.

Heritage, M., Walqui, A., & Linquanti, R. (2015). *English language learners and the new standards: Developing language, content knowledge, and analytical practices in the classroom*. Harvard Education Press.

Kibler, A. K., Walqui, A., & Bunch, G. C. (2015). Transformational opportunities: Language and literacy instruction for English language learners in the common core era in the United States. *TESOL Journal*, *6*(1), 9–35. doi:10.1002/tesj.133

Lucas, T., Strom, K., Bratkovich, M., & Wnuk, J. (2018). Inservice preparation for mainstream teachers of English language learners: A review of the empirical literature. *The Educational Forum*, *82*(2), 156–173. doi:10.1080/00131725.2018.1420852

Walqui, A., & Van Lier, L. (2010). *Scaffolding the academic success of adolescent English language learners: A pedagogy of promise*. WestEd.

KEY TERMS AND DEFINITIONS

Backward Design: The process of designing curricula that begins with end goals and determines appropriate and effective learning events to support learners' progress toward those goals.

Disciplinary Learning: Development of conceptual understandings, knowledge, and skills within the academic disciplines, such as mathematics, sciences, and social studies.

English Learner: An institutional ascription placed upon a student who has been deemed as still developing proficiency in English based on standardized assessment scores.

Language Lens: Classroom teaching that maintains focus on literacy or content-area goals while paying particular attention to the language needed to achieve those goals.

Professional Development: Strategically designed learning opportunities for inservice educators to develop professional expertise and repertoires of practice to enhance student learning.

Responsive Teaching: Deliberate curricular and instructional choices emergent from learners' rich and unique backgrounds, including cultural practices and home languages.

Scaffolding: Strategic use of methods, materials, and resources to attend to language demands so that learners can simultaneously access content learning and develop language.

Sheltered Instruction: Programmatic approach to teaching English learners in the content areas that prioritizes maintains content-area focus while targeting language development.