

Understanding Their Language

Online Professional Development for Teachers of ELLs



BY SARA RUTHERFORD-QUACH, ANNIE CAMEY KUO,
AND HSIAOLIN HSIEH

When Shaeley Santiago began teaching in Perry, Iowa, nearly 20 years ago, the state's school-age demographics were different than they are today. At the time, Iowa was nearly 93 percent white, with its student population of more than 600,000 only slightly more diverse. Shaeley was one of a handful of educators in her district certified to teach emergent bilinguals, sometimes referred to as dual language learners (DLLs) or, when designated as such, English language learners (ELLs). She taught middle school language learners of all proficiencies in the morning and then taught newly arrived immigrants in middle and high school during the afternoon.

Sara Rutherford-Quach is the director of academic programs and research for Understanding Language at the Stanford Graduate School of Education. Annie Camey Kuo is the director of research-practice partnerships at Understanding Language. Hsiaolin Hsieh is a PhD student at the Stanford Graduate School of Education.

Shaeley enjoyed her job and treasured her students. But she often felt isolated from her colleagues. The students, particularly the newcomers in their self-contained program, were also segregated from the larger student community. Although the schooling of the district's middle and high school students was deemed the responsibility of the educator collective, the education of emergent bilinguals was often thought of as solely the concern of ELL educators. This was the norm not only in Perry or even just Iowa, but across the country.

Today, the linguistic and ethnic diversity of Iowa's school-age population has more than tripled. The biggest demographic shifts have occurred not only in metro areas but also in smaller manufacturing communities. For example, in 2000, ELLs made up slightly more than 1 percent of the preK-12 student population of the Denison Community School District, located a little more than one hour from Perry. Today, ELLs are nearly 60 percent of the Denison population. The percentage in Perry itself, where Shaeley began teaching, grew from 11.5 percent in 2000 to 24 percent in 2016.¹ Similar demographic shifts have occurred statewide and, indeed, nationwide.



Language learners and immigrants should not be conflated; these groups are related but distinct. While emergent bilinguals are often the *children* of immigrants, most are born in this country and are U.S. citizens.² Research shows their bicultural and bilingual experiences provide them with a unique global perspective and an increased cognitive flexibility.* Thus, the inclusion of emergent bilinguals can diversify and deepen learning experiences for an entire school. Moreover, ensuring that ELLs have access to challenging academic content and the instructional supports they need is in the best interest of all who believe that an educated citizenry is vital to a functioning democracy.[†]

Amid all these changes, Shaeley's dedication to ELLs has remained steadfast. She now works in a larger district, the Ames Community School District, and is an instructional coach and teacher on special assignment. She is also an instructor at Drake University, teaching a course for both pre- and in-service teachers on meeting the needs of ELLs. These roles have given her a unique perspective. She can observe patterns in current classroom instruction and in teacher learning, not only in Ames, but across the state. And she can see how the role of language in content-area learning has been amplified with the advent of the Common Core State Standards and the Next Generation Science Standards. Although Iowa's growing population of emergent bilinguals has brought with it enormous academic, linguistic, and civic potential that could enrich the state's school system, the potential of neither the standards nor the students can be realized without more effective learning opportunities for teachers.³

Here we arrive at the crux of the problem, which is bigger than Iowa and affects nearly every K-12 educational system in this country. There are now powerful standards and expectations that make visible the connections among language, analytical practices, and content-area knowledge.⁴ Yet not all educators have access to adequate training opportunities, resources, or models to enable them to reconfigure the role of language in content-area

learning, appropriately change instructional practices, and ensure all students—but particularly English language learners—have access to rigorous content.⁵

Understanding Language

Seven years ago, a group of scholars from across the country recognized this growing need to support educators who are tasked with ensuring that ELLs learn rich academic content knowledge and develop disciplinary language in English, a language many do not speak at home. Together, they formed Understanding Language (UL), a research and practice initiative housed at Stanford University. Chaired by emeritus professor Kenji Hakuta and Maria Santos, a seasoned district administrator, UL brought together leading experts in both language development and content-area learning.

One of our primary goals at Understanding Language has been to heighten educator awareness about the critical role that language plays in college- and career-ready standards. While UL's portfolio is quite diverse, the organization's work is unified by two core tenets:

1. Language is social practice or action;⁶ and
2. Language develops through use, not statically or separately from content knowledge, but instead during carefully scaffolded interactive opportunities and processes of meaning-making.⁷

In other words, the learning of language and the learning of content occur simultaneously, and this expectation should be made explicit. Throughout its seven-year tenure, UL has operationalized these tenets, creating foundational papers, curricular and instructional resources, and, more recently, online professional development courses and modules.

High-Quality Professional Learning Opportunities to Serve ELLs

UL first began developing professional development opportunities for educators of English language learners two years after its formation, in 2013. The organization moved in this direction after it became clear that there was an urgent need to provide educators across the country with structured, comprehensive, and high-quality professional learning addressing how to integrate and organize language and content instruction to better serve ELLs. This need was reiterated time and time again, during conferences, in research studies, and in communications with states, districts, and schools. Since that time, UL has offered approximately 15 different online courses serving more than 50,000 participants. These courses span grade levels and content areas and focus on the core language and analytical practices that underlie college- and career-ready standards. This suite of courses is often referred to as Understanding Language Online or UL Online.

Shaeley was an early adopter among those 50,000 participants. She learned of UL Online through social media and signed up for the very first course we offered: Constructive Classroom Conversations (CCC). She found that the course was rigorous, illustrative, and connected to her classroom practice.⁸

She appreciated its focus on recording and transcribing student conversations as well as using formative assessment to gain a deeper understanding of them. She also applied the conversation skills framework the course offered, teaching students to

*For more on the assets these students bring, see "The Potential and Promise of Latino Students" in the Spring 2017 issue of *American Educator*, available at www.aft.org/ae/spring2017/gandara.

†For more on how civic engagement is critical to democracy, see "The Power of Active Citizenship" in the Summer 2018 issue of *American Educator*, available at www.aft.org/ae/summer2018/graham_weingarten.

co-construct knowledge, building on each other's turns and ideas in various ways.

After engaging in this first course, Shaeley enrolled in other UL courses, including two that addressed student argumentation (Supporting ELLs Under New Standards, and Learning as Evidence: Improving ELLs' Argumentation Skills through Formative Assessment Practices), as well as two others focused on literacy development using high-impact analytical language skills (Integrating English Language Development and Content Area Learning, and Seven Essential Practices for Developing Academic Oral Language and Literacy in Every Subject). Shaeley continues to draw from these experiences, and particularly from the argumentation courses, in both her K–12 work and her role as a teacher educator. For example, she shows the secondary teachers she coaches how to use UL's Argumentation Analysis Tool to formatively assess student arguments, which helps teachers gauge whether students are mastering one of the 10 essential English Language Proficiency Standards⁹ that Iowa has adopted.

As classroom researchers and teacher educators, the course instructors for the first CCC course were aware of the pervasiveness of strategies such as “turn and talk” and “pair-share.” Across grade levels and content areas, K–12 teachers were constantly asking students to share their ideas with a partner or discuss issues, details, or solutions in pairs. Rarely, however, was the purpose and content of these exchanges reflected on or examined. More commonly, students were asked to turn and talk as a way to reinforce recall, bring their attention back to a topic, or even fill time during transitions.¹⁰ One of our goals was to help classroom teachers make student-to-student conversations more productive. (For more on meaningful classroom talk, see the article on page 18.)

Together, the course development team worked with other experts in the field to develop the Conversation Analysis Tool, a rubric designed to help teachers and students focus on the key components of conversations that can make them meaningful, of high quality, and educationally valuable. And while the tool has changed slightly through the years, its focus and simplicity has remained. It guides students to take appropriate turns to construct a conversation and build on previous turns to expand upon an idea, which then enables them to focus on content or skills related to the learning objectives.¹¹

Each of the three dimensions of the Conversation Analysis Tool has four descriptor levels (“no attempts,” “attempting interaction,” “inconsistent evidence,” and “strong evidence”) that aid the evaluator in best describing the language sample. These descriptors guide evaluators to treat language and learning as a continuum and avoid labeling learners with specific, static numeric scores.

We, the course development team, then built the curricular structure and course sequencing around this formative tool. Originally consisting of four distinct sessions, the first course included a variety of select readings and resources to introduce core content, such as the role of language in content-area learning and standards, the features of high-quality conversations, and the different kinds of conversation skills students could use and learn to build on each other's ideas. We even included videos of students in classrooms engaging in these activities—across grade levels and content areas—as models of what students were already doing and could do conversationally.

Importantly, the course assignments required participants to listen closely to and formatively assess their own students' conversations. This process allowed them to focus on students' language and then build on areas of growth to inform, change, and refine instructional practice. The pedagogical approach for Constructive Classroom Conversations included the following steps:

1. Ask participants to elicit, collect, and transcribe conversation samples of their own K–12 students as they learn content;
2. Have participants analyze these conversation samples using the Conversation Analysis Tool;
3. Allow participants to examine student conversations other course participants have submitted and provide peer feedback;
4. Base classroom lessons on participants' emerging understanding of their students' conversations and skills; and
5. Repeat this cycle of data collection, analysis, peer reviews, and instructional implementation, building on insights.¹²

The learning of language and the learning of content occur simultaneously, and this expectation should be made explicit.

Focus and Evolution of Online Offerings

The first CCC course was open to anyone and everyone interested in the topic, but participants needed access to a K–12 classroom to get the most out of the assignments we asked them to undertake. A majority of participants from this course were classroom teachers of different grade levels and subject areas. Coaches and administrators also participated to support the professional development effort in their schools and districts. While we now charge an enrollment fee, the first conversations course, along with other pilot courses that were available between 2013 and 2018, was fully funded by grants and thus free for educators. An updated version of the conversations course is currently open for enrollment. To learn more, educators can visit Understanding Language's course information page at <http://ell.stanford.edu/courses>.

To receive proof of course completion, participants were required to successfully complete pre- and post-course surveys, all the session assignments, and peer reviews. Mini assessments in the surveys provided a way to observe learning growth, and the session assignments created opportunities for participants to transfer and apply knowledge and practices from the course to their classrooms. Peer reviews further extended the commu-



nity of learners beyond physical boundaries. Participants then could use this completion evidence, which usually came in the form of a digital certificate, to receive professional development hours or continuing education units from their school districts.

The demand for the initial CCC course encouraged us to continue the effort and create other courses, such as Supporting Student Argumentation, Integrating Language Development and Content Learning in Math, and Using Complex Texts to Develop Language. While each of these courses was unique in its content, they all employed a similar structure and model as the conversations course, emphasizing listening to and analyzing students' language through formative assessment cycles and adjusting instruction accordingly.

In the new standards, *all* teachers are positioned as teachers of language and literacy.

The nature of these types of massive open online courses allows and invites participants to enroll with different purposes and goals. Some participants, for example, sign up to access the resources, which they use and adapt within their schools. Others are teacher educators who disseminate the information to their own student teachers.

Accentuating Formative Assessment and Inquiry in UL's Online Course Model

At first glance, the UL courses might look similar to other online courses or professional development offerings. Like most online courses, they are structured into several "sessions" (or learning "modules," as teachers often refer to them). Each session consists of a number of instructional videos aligned to learning objectives, practice-oriented readings, and individual or team assignments.

When you look closely, however, it becomes clear that there are substantial differences to our approach. First, course content focuses on practices that are central to college and career readiness, such as argumentation and reasoning, and addresses the role of language within these practices. Second, all the courses use a strategic and specific inquiry process to formatively assess ELLs' language use. These two features were originally designed by the UL Online course development team as core features of the first course. But the UL courses differ in a third important way as well: they promote and support a particular type of

blended learning model, a feature that emerged as participants began experimenting and discovered that both online and in-person support were indispensable in making the most of their course experience. We discuss this blended model in some detail later in the article.

Course Content Prioritizes Curricular Connections

One of our central goals has been to make visible the connections among language, analytical thinking (e.g., analyzing texts, composing arguments, using evidence), and content-area learning, particularly in the context of the new standards.¹³ This integrated and cross-curricular focus has driven the development and implementation of all our professional development courses and materials. While college- and career-ready standards do not fundamentally alter the nature of any particular discipline, they do highlight the role of language in content-area learning. Language has always played a significant role in content learning, but this role often has been obscured.

Moreover, content teachers often did not see themselves as language instructors. That responsibility fell on English language development or possibly English language arts teachers.¹⁴ In the new standards, however, language takes a more prominent role across content areas, and *all* teachers are positioned as teachers of language and literacy.

Student expectations and assessments also have become more "language intensive." Students are required to make sense of complex texts, solve problems, engage in argumentation, and participate in constructive and cooperative peer conversations as well as provide explanations for their thinking and reasoning across content areas. Students thus are expected to communicate their disciplinary learning on a daily basis through these language practices. And if analytically challenging and language-rich academic experiences are to become integral to students' daily classroom experiences, then teachers must provide them.

To that end, most of the assignments in UL courses require educators to listen carefully to students' language use, collect and analyze student language in oral and written forms, and apply insights from this process to strengthen instruction.¹⁵ In the CCC course, for example, participants plan a discussion-worthy activity, teach a lesson embedding the activity, elicit student learning evidence during the activity—by recording and transcribing a portion of a student-to-student conversation—and then analyze the transcription using a rubric to improve teaching and learning.

Pedagogical Approach That Focuses on Inquiry

Another feature that distinguishes UL courses is their strategic and reflective approach, which is in line with research asserting that teachers of language learners benefit from multidimensional learning opportunities. In other words, professional development should aim for deeper, reflective learning—going beyond simple sets of instructional activities or strategies.¹⁶

In the conversations course, for example, instead of jumping right into a skill or skills that a teacher participant would like to develop or improve (e.g., facilitating constructive conversations, crafting educative prompts, helping students support their ideas with evidence), an initial assignment asks participants to observe the conversations their students currently are having in their classrooms. With the status quo in mind, the participants then

learn about constructive conversations and skills to foster these conversations, help students to build on each other's turns and ideas (e.g., creating ideas, clarifying, supporting), and learn how to create discussion-worthy prompts.¹⁷

An essential feature of UL courses is the incorporation of formative assessment to gauge where students are in their learning by gathering and assessing evidence and planning next steps.¹⁸ This instructional approach is further intertwined with course learning objectives. For example, the learning goals for CCC include: (1) listen purposefully in order to assess student-to-student conversations, (2) craft effective prompts and create conversational opportunities within a lesson, (3) model and build activities for cultivating constructive classroom conversations, and (4) provide productive feedback to students and make instructional changes to strengthen conversations.

Finally, using language analysis tools, such as the Conversation Analysis Tool or the Argumentation Analysis Tool, to formatively assess teaching and learning is central. These tools are designed to shift educators' attention toward helping students use language to engage in and communicate learning rather than simply focus on vocabulary or grammar.

Leveraging Blended Learning Opportunities

UL Online offerings explicitly emphasize building educator communities through blended learning or hybrid learning, which incorporates both online and face-to-face components. This recommended feature was not originally part of the UL course design and, indeed, is not required of course participants. Instead, it grew from the experiences and input of course participants.

For instance, during our first CCC offering, several district-level English language development coaches from Seattle Public Schools participated in the course and decided to incorporate it into their district's professional development plan. They then augmented the online offering with on-site, in-person professional development support and incentives (e.g., hourly payment, professional development clock hours). Since 2014, Seattle has run seven iterations of its own hybrid learning model using the CCC course. More than 200 Seattle teachers have completed this professional development opportunity.

While Seattle has been our oldest collaborator in the hybrid model journey, it certainly has not been the only district experimenting with combining UL Online courses and localized, face-to-face support. In 2014, the Los Angeles Unified School District also began experimenting with its own blended learning model. The district created fellowships to encourage and support teachers to take on this learning opportunity. UL collected and compiled successful stories from these early adopters and shared best practices as supplementary materials in the course. Since 2016, there have been more and more course participants receiving local support from their schools or districts, as well as organizing professional learning communities at their local sites.

We have found that course participants who are part of a blended learning cohort are much more likely to complete all course requirements and receive a statement of completion. Research examining the 2014 and 2015 iterations of the Constructive Classroom Conversations course, for example, demonstrated that 79 percent of participants with face-to-face or hybrid supports completed all course requirements, while only 2 percent of



participants without these supports did.¹⁹ This is notable because completion rates sometimes can serve as a rough measurement for learning, particularly with respect to targeted objectives. The type and amount of district or school support also affect completion rates. In a study conducted on a different UL course on supporting student argumentation, we found that completion rates correlated with support configurations; overall, the more comprehensive supports participants received, the more likely they were to complete the course.²⁰

Impact of the Courses

Educators who have completed these courses consider them to be valuable. For example, when surveyed about overall experience with the courses, 95 percent of course completers responded positively. And 91 percent reported being satisfied, very satisfied, or extremely satisfied with what they learned from the courses, asserting that they felt more knowledgeable about the content.

Perhaps most importantly, educator participants who have taken and completed UL courses, particularly the foundational CCC course, have been very likely to demonstrate growth with respect to targeted learning outcomes, as measured by pre- and post-assessment measures. In other words, course participants are learning how to support students' language and content learning.²¹

Participants are also applying that knowledge to their classrooms. They report the courses have: (1) shifted their thinking about the role and use of language during content-area learning, (2) led them to integrate more discourse work throughout disciplinary lessons, (3) prompted them to incorporate formative assessment with a language lens into their instructional practice and involve students in this process, and (4) shifted their attention away from the structural components of language to how students are using language to communicate learning.²²

It is our hope that those seeking to build sustainable professional development models will learn from this approach. For educators always on the lookout for quality professional development to support ELLs' access to challenging standards and rigorous content, UL hybrid course models are extremely useful and practical. They offer a vision for systematic change—not only in reference to con-

(Continued on page 40)

Chess and ELLs

(Continued from page 26)

our students with our own strengths and resources? And most of all, have we done everything we can to show our students that they have what it takes to be champions? □

Endnotes

1. See Sergio González Rodríguez, *Huesos en el desierto* (Barcelona: Anagrama, 2002).
2. Faiza M. Jamil, Ross A. Larsen, and Bridget K. Hamre, "Exploring Longitudinal Changes in Teacher Expectancy Effects on Children's Mathematics Achievement," *Journal for Research in Mathematics Education* 49 (2018): 57–90.
3. E. Natalia Strobach Oronoz, *17–18 School Climate Survey: Henderson Middle School* (El Paso, TX: El Paso Independent School District, 2018).
4. For information on programs that have successfully increased Latina involvement in STEM (science, technology, engineering, and math) fields, see Robert W. Fairlie and Rebecca A. London, "Getting Connected: The Expanding Use of Technology among Latina Girls," in *Latina Girls: Voices of Adolescent Strength in the U.S.*, ed. Jill Denner and Bianca Guzman (New York: NYU Press, 2006), 168–184.
5. Christia Spears Brown and Campbell Leaper, "Latina and European American Girls' Experiences with Academic Sexism and Their Self-Concepts in Mathematics and Science during Adolescence," *Sex Roles* 63 (2010): 860–870.

When Educators Lead the Way

(Continued from page 33)

tion for all students. In addition, the plan also ensured that students had access to science, technology, engineering, arts, and math (STEAM) activities and enrichment. Opportunities for ongoing collaboration enhanced teachers' ability to use this extra time to strengthen students' foundational skills to meet rigorous, grade-level standards.

In 2016, the Mildred Avenue K–8 School became the first school in Massachusetts' history to rise from the 1st percentile of academic achievement to Level 1 status, Massachusetts' top school performance designation. Across the commonwealth, where several turnaround schools have struggled to sustain progress through leadership turnover and other school changes, the Mildred is

an example of ongoing improvement. With a strong cadre of teacher leaders in place and a professional culture where staff share effective practices across classrooms, teachers constantly explore new ways to meet the needs of their students. Beyond their impact on classroom instruction, these factors have also led to high levels of teacher retention at the Mildred, strengthening the school's ability to continue its strong academic performance and positive school climate. □

Endnotes

1. Agreement between the School Committee of the City of Boston and the Boston Teachers Union, Local 66, AFT, AFL-CIO, contract ratified October 16, 2012, accessed July 23, 2018, www.btu.org/wp-content/uploads/2010/08/2010-2016-BTU-Contract-2.pdf.
2. Boston Public Schools Office of Human Capital, Mildred Avenue K–8 School Teacher Evaluation and Retention Data, 2012–present (unpublished raw data, accessed May 31, 2018).
3. Boston Public Schools budget director, Mildred Avenue K–8 School Teacher Compensation (unpublished raw data, accessed June 14, 2018).

Understanding Their Language

(Continued from page 31)

tent delivery, but also in terms of the content itself. Ultimately, each course component is grounded in the following educational realities: language is a core component of every discipline; content-area learning and language development happen simultaneously and should be treated as such; we are all language teachers; and, perhaps most important, to truly support students in their development, you have to first listen to their language. □

Endnotes

1. "Student Demographic Information," Iowa Department of Education, accessed July 2, 2018, www.educateiowa.gov/education-statistics#Student_Demographic_Information.
2. Diana Quintero and Michael Hansen, "English Learners and the Growing Need for Qualified Teachers," *Brown Center Chalkboard* (blog), Brookings Institution, June 2, 2017, www.brookings.edu/blog/brown-center-chalkboard/2017/06/02/english-learners-and-the-growing-need-for-qualified-teachers; and Kevin J. A. Thomas, "Socio-Demographic Determinants of Language Transition among the Children of French- and Spanish-Caribbean Immigrants in the US," *Journal of Ethnic and Migration Studies* 37 (2011): 543–559.
3. María Santos, Linda Darling-Hammond, and Tina Cheuk, "Teacher Development to Support English Language Learners in the Context of Common Core State Standards" (Stanford, CA: Understanding Language Initiative, 2012), <http://ell.stanford.edu/publication/teacher-development-appropriate-support-ells>; and Guadalupe Valdés, Amanda Kibler, and Aida Walqui, *Changes in the Expertise of ESL Professionals: Knowledge and Action in an Era of New Standards* (Alexandria, VA: TESOL International Association, 2014).
4. Leo van Lier and Aida Walqui, "Language and the Common Core State Standards" (Stanford, CA: Understand-

ing Language Initiative, 2012), <http://ell.stanford.edu/publication/language-and-common-core-state-standards>.

5. National Academies of Sciences, Engineering, and Medicine, *Promoting the Educational Success of Children and Youth Learning English: Promising Futures* (Washington, DC: National Academies Press, 2017).
6. Van Lier and Walqui, "Language and the Common Core State Standards"; Fred Erikson, *Talk and Social Theory: Ecologies of Speaking and Listening in Everyday Life* (Cambridge, UK: Polity Press, 2004); and Marjorie Harness Goodwin, *He-Said-She-Said: Talk as Social Organization among Black Children* (Bloomington: Indiana University Press, 1991).
7. Neil Mercer and Christine Howe, "Explaining the Dialogic Processes of Teaching and Learning: The Value and Potential of Sociocultural Theory," *Learning, Culture, and Social Interaction* 1 (2012): 12–21; Guadalupe Valdés, Sarah Capitelli, and Helen Quinn, "Talk and Text: Affordances for the Development of Language for Science" (paper, American Educational Research Association Annual Meeting, New York, April 2018); and Lev Semenovich Vygotsky, *Mind in Society: The Development of Higher Psychological Processes* (Cambridge, MA: Harvard University Press, 1978).
8. Ruth Chung Wei et al., *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad* (Dallas: National Staff Development Council, 2009).
9. For more on these standards, see "ELP Standards," ELPA21, accessed August 3, 2018, www.elpa21.org/elp-standards.
10. Sara Rutherford-Quach, "'Show Me Your Listening Position': Embodied Silence and Speech in a Second Grade Class of Language-Minority Students" (PhD dissertation, Stanford University, 2013).
11. Sara Rutherford-Quach, Karen Thompson, Claudia Rodríguez-Mojica, and Diego Román, "Using a MOOC to Improve Teachers' Understanding and Facilitation of Academic Arguments" (paper, American Educational Research Association Annual Meeting, Washington, DC, April 2016); María Santos, Linda Darling-Hammond, and Tina Cheuk, "Teacher Development to Support English Language Learners in the Context of Common Core State Standards" (Stanford, CA: Understanding Language Initiative, 2012), <http://ell.stanford.edu/publication/teacher-development-appropriate-support-ells>; and Guadalupe Valdés, Amanda Kibler, and Aida Walqui, *Changes in the Expertise of ESL Professionals: Knowledge and Action in an Era of New Standards* (Alexandria, VA:

TESOL International Association, 2014).

12. Rutherford-Quach et al., "Using a MOOC."
13. For more on these connections, see Tina Cheuk, "Relationships and Convergences" (Stanford, CA: Understanding Language Initiative, 2013), http://ell.stanford.edu/sites/default/files/VennDiagram_practices_v11%208-30-13%20color.pdf.
14. Valdés, Kibler, and Walqui, "Changes in the Expertise of ESL Professionals."
15. Sara Rutherford-Quach, Lisa Zerkel, and Betsy Williams, "Combining Online and Face-to-Face Learning: Examining a Hybrid MOOC Model for Teacher Professional Development" (paper, American Educational Research Association Annual Meeting, Chicago, April 2015); and Sara Rutherford-Quach, Jeff Zwiers, and Hsiaolin Hsieh, "What Can We Learn? Insights and Challenges Related to Data Generated from Professional Development Courses Focused on Student Language Use" (paper, American Educational Research Association Annual Meeting, New York, April 2018).
16. George C. Bunch, "Preparing Mainstream Secondary Content-Area Teachers to Facilitate English Language Learners' Development of Academic Language," *Yearbook of the National Society for the Study of Education* 109, no. 2 (2010): 351–383; and Rutherford-Quach et al., "Using a MOOC."
17. Jeff Zwiers, Susan O'Hara, and Robert Pritchard, *Common Core Standards in Diverse Classrooms: Essential Practices for Developing Academic Language and Disciplinary Literacy* (Portsmouth, NH: Stenhouse, 2014).
18. Margaret Heritage, "Formative Assessment: An Enabler of Learning," *Better: Evidence-Based Education* 3, no. 3 (Spring 2011): 18–19; Margaret Heritage, *Formative Assessment in Practice: A Process of Inquiry and Action* (Cambridge, MA: Harvard Education Press, 2013); Smarter Balanced Assessment Consortium, "The Formative Assessment Process," accessed July 2, 2018, <https://portal.smarterbalanced.org/library/en/formative-assessment-process.pdf>.
19. Rutherford-Quach, Zerkel, and Williams, "Combining Online and Face-to-Face Learning."
20. Rutherford-Quach et al., "Using a MOOC."
21. Rutherford-Quach, Zwiers, and Hsieh, "What Can We Learn?"; and Rutherford-Quach, Zerkel, and Williams, "Combining Online and Face-to-Face Learning."
22. Rutherford-Quach, Zwiers, and Hsieh, "What Can We Learn?"