

**Formative Assessment As Contingent Teaching and Learning:
Perspectives on Assessment *As* and *For* Language Learning in the Content Areas.**

Margaret Heritage (CRESST/UCLA)

Aida Walqui (WestEd)

Robert Linqanti (WestEd)

The Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS) place heightened demands on what students must do with language as they engage in content-area learning. Such expectations are consistent with the understanding among second language educators that, given content- and language-rich learning environments in which meaningful interactions with teachers and peers are fostered, ELLs can both acquire language and use their emerging English to engage in content learning. (Bunch, Kibler, & Pimentel, 2012; Moschkovich, 2012; Quinn, Lee, & Valdés, 2012; van Lier & Walqui, 2012).

Supporting ELLs' content learning through a focus on language requires shifts in perspective on language and language learning: from an individual process to a socially engaged process; from a linear building of structures and vocabulary aimed at correctness and fluency to a non-linear and complex developmental process aimed at comprehension and communication; and from teaching language *per se* to supporting participation in activities that simultaneously develop conceptual understanding and language use (Walqui, 2012).

The shifts in perspective on language learning emphasized in the CCSS and the NGSS will require corresponding changes in assessment for ELLs. Needed is a comprehensive and coherent assessment system that provides decision makers with the necessary information so that they can support ELLs' acquisition of language and subject matter content simultaneously. This paper focuses on a critically important and often misunderstood dimension of that assessment system – the classroom-centered practices of formative assessment – and, specifically, on how formative assessment can support contingent teaching and learning for ELLs. First, we define formative assessment and discuss how its

practice is implemented in the classroom by both teachers and students. Next, we explore developing teacher expertise to engage in formative assessment in the education of ELLs in an era of new standards. Finally, we examine how educational policymakers can foster use of formative assessment practice by teachers of ELLs.

Formative Assessment

No two ELLs are the same. They come to learn in school from a range of backgrounds, cultures, and language groups, and they bring with them a set of diverse interests and experiences. It follows then that the way ELLs acquire language will not be homogeneous. They do not move up a “developmental ladder” of language learning through discrete stages in lockstep. Rather, individual students develop their language capacity by constantly enacting and adapting language usage to make meaning. And they do so in response to affordances emerging from dynamic communicative situations (Larsen-Freeman & Cameron, 2008). Thus not only are ELLs learning language and content simultaneously, they are also adapting their language resources to new circumstances and new needs (Larsen-Freeman, 2013). The recognition of this perspective is fundamental to the practice of formative assessment, which, when effectively implemented, can support students and teachers to engage in contingent learning and pedagogy in the context of acquiring subject-matter content.

In his seminal paper on formative assessment, D. Royce Sadler identified feedback as the decisive element in formative assessment (Sadler, 1989). Beginning from a systems perspective conceptualization of feedback as “information about the gap between the actual level and the reference level of a system parameter that is used to alter the gap in some way” (Ramaprasad, 1983, p. 4), Sadler conceived of formative assessment as a feedback loop to close the gap between the student’s current learning status and desired learning goals. He made clear that *information itself is not feedback*, but only becomes feedback when it is actively used “to alter the gap” (Sadler, 1989, p. 121). In Sadler’s model, the teacher gets feedback from formative assessment evidence while learning is developing, and uses the information *both* to make changes in teaching, *and* to provide feedback to the students about how they can move their own

learning forward. In this way, the teachers' pedagogical response – instructional adjustments or direct provision of feedback – are contingent upon the evidence obtained.

Following Sadler's model, the practice of formative assessment begins with a clear articulation of proximate learning goals and performance criteria. Both teachers and students need to understand what is to be learned and how they will know if learning has been successful. In the case of ELLs who are developing language and content learning simultaneously, learning goals and performance criteria will necessarily reside in the context of the language use – the concepts to be learned and the language through which the concepts may be encoded, connected and sustained (cf. Boyd & Richerson, 2005).

The teacher communicates the goals and success criteria to students at the beginning of the lesson, or co-constructs them with the students, providing both teacher and students with clear expectations of the content focus of the lesson and the affordances of the learning situation for linguistic action (van Lier, 2000). This practice supports a goal-oriented learning experience, which has been associated with increased motivation and self-regulation (Ames, 1992; Bandura, 1997; Boekaerts, Pintrich & Zeidner, 2000), and has implications for students' engagement and persistence in learning (Dweck, 1999; Harlen, 2006; Stipek 1998).

As noted earlier, ELLs do not acquire language from a series of uni-directional linguistic inputs from teachers and peers. Instead, ELLs learn language through socio-cognitive processes through which they make sense of the language that they are exposed to with other interlocutors, and co-adapt language in the service of making meaning (Larsen-Freeman, 2013). In turn, socio-cognitive processes are enabled in classrooms that operate as communities of practice and in which students are cognitive agents interacting with each other. Participant-oriented practices in such classrooms include interactions between and among students and classroom discussions that not only promote students' learning of content but also encourage their use of language and their participation in the discourse practices that organize the discussions. Consequently, using language and learning language become simultaneous (Larsen-Freeman, 2013).

Importantly, for formative assessment, participant-oriented practices provide the context in which ongoing evidence of language use and content learning can be obtained, for example, from teacher-student interaction and student-student interaction. In addition, student writing as well as observable student actions – for example, when students follow oral and written directions – are potential sources of evidence (Heritage, 2013). From these sources, teachers draw inferences about students' learning relative to the intended learning goals and performance criteria and then make pedagogical moves that are contingent upon the feedback obtained from the evidence.

Contingent pedagogical moves to alter the gap will involve some form of scaffolding. Scaffolding is a metaphoric concept used to describe the assistance provided by adults and peers that enables learners to solve a problem, carry out a task, or achieve a goal that would be beyond their unassisted efforts. According to Wood, Bruner, and Ross (1976), scaffolding includes enlisting the student's interest in and adherence to the requirements of the task; reducing the number of steps required to solve a problem by simplifying the task; accentuating certain features of the task that are relevant; keeping the student "in the field" to pursue the particular objective by making it worthwhile for him or her to risk the next step; controlling frustration; and demonstrating or modeling an idealized version of the task. For example, in the course of scaffolding understanding and language simultaneously, a teacher might engage in a line of questioning designed to structure the student's thinking and encourage responses that enable the student to use already acquired language in a new context. Similarly, while scaffolding student's thinking with the aid of graphics, the teacher might intentionally expose the student to forms of language that can support both comprehension and communication.

Scaffolding also has three other important properties: 1) it is contingent: for scaffolding to occur, the teacher uses strategies that are clearly based on immediately preceding student responses; 2) scaffolding should fade, in that it decreases over time, at a rate dependent on the student's rate of acquisition and capacity; and 3) scaffolding involves transference of responsibility from teacher to student, in which the responsibility for performance, in particular, is gradually handed over to the learner (Tharp & Gallimore, 1991; Walqui & van Lier, 2010).

The term scaffolding is frequently used synonymously with instruction in the sense of a teacher-initiated, directive instructional strategy. This kind of strategy is evident when a teacher implements a lesson comprised of small, sequenced tasks that all students undertake simultaneously under a teacher's direction. This usage is in conflict with the original metaphor, which stresses responsive assistance to the immediate contingencies of student needs "in the moment" (Addison Stone, 1998). Since teacher-initiated, directive instruction lacks the characteristics of contingency, decreasing levels of assistance and transfer of responsibility, it remains methodologically different from scaffolding. While a lesson in which formative assessment occurs may begin with teacher-initiated, directive instructional strategy, teachers' responses to students as a result of gathering and interpreting evidence of comprehension and communication will be contingent on what the evidence shows about their immediate learning status (Heritage, 2013).

Another contingent pedagogical move a teacher can make is providing feedback to students, which may also be considered a form of scaffolding. Consistent with the idea that what learners learn is the result of an active, constructive meaning-making process rather than a passive, receptive one, the primary goal of feedback provided by either teacher or peers is to assist students to take action to reduce the discrepancy between their current learning state and the intended learning (William, 2012). A meta-analysis conducted by Kluger and DeNisi (1996) showed that feedback that focuses on providing information about how the student performs a task and gives suggestions that can be taken up by the student about how to improve is much more effective than evaluative feedback that only informs the student of how well she is doing (p. 254-84). This finding has been confirmed by other researchers (Hattie & Timperely, 2007; Lipnevich & Smith, 2008; Shute, 2007). Feedback that provides suggestions to students rather than correct answers supports a goal-oriented approach to learning and self-regulated learning processes (Boekaerts, 2006). It should be noted here that grades do not meet the criteria for effective feedback, and as such do not play a role in formative assessment practice.

The implementation of contingent pedagogical moves – scaffolding and feedback – may be understood as a twofold uncertainty. First, as an ELL student is learning content and correspondingly

expanding language use in new ways, she may recognize and communicate relevant elements of this understanding in a way that is uncertain, indistinct or even regressive. At this point, neither the conceptual understanding, nor the language being used to communicate understanding is consolidated. In this situation, the teacher's objective is to establish the student's current understanding, and then assist the student toward a more secure understanding as well increasing her capacity to use language for the purpose of deriving and conveying meaning.

Second, in the circumstances created by the ELL students' incomplete and emergent understandings and language the teacher's position is also necessarily characterized by uncertainty. Her task is to grasp relevant elements of indistinctly presented cognitive structures and language forms and assist in establishing them more securely. In this process, the teacher must also work within, and remain comfortable with, a context of uncertainty both about the student's exact conceptual and linguistic positions and the appropriate pedagogical move to develop them further. The overall situation of teacher and learner, then, is one in which both parties are, in their different ways, on the edge of understanding. The successful accomplishment of this "edge work" by both teacher and learner constitute the core objective and outcome of formative assessment practice (Heritage & Heritage, 2011).

An Example of Practice

In the following section, we see an example of formative assessment and contingent pedagogy. In Ms. Olvera's fifth-grade class, the students are learning about persuasive writing with a focus, selected by the students, on "saving the environment." The students had previously learned about the idea of "arguments" and reasons to support the argument. Ms. Olvera joins Maria, an ELL, who is working on her persuasive piece, in a routine one-on-one formative assessment interaction. Ms. Olvera begins the interaction (line 1) with a request that Maria share with her what she is working on. It is noticeable in this initial turn that Ms. Olvera accounts for her request in terms of understanding what Maria's objective is. Her additional remark "just so I understand what it is that you're..." registers the child's agency in the work and her own role as an assistant in the formation of the argument. After Maria has proposed

recycling as her primary argument, Ms. Olvera acknowledges this goal and then asks for Maria's "reasons" for proposing recycling. At this point, having offered "to save the earth" as her primary reason, she offers a second: recycling will save people who pick up bottles and cans from the trash from getting injured in the process (lines 6-8). This proposal incorporates a linguistic error in which Maria uses the word "provide" when the most likely appropriate words would be "protect" or "prevent" (line 6). Ms. Olvera's response to this error is noteworthy.

Maria 1

- 1 Ms. O: Read me your argument first, just so that I understand what
 2 it is that you're...
- 3 Mari: I think people should recycle because like you, (1.0) you could
 4 help the earth get well clean and healthy.
- 5 Ms. O: (1.5) Okay. And your reasons?
- 6 Mari: To save the earth, (2.5) you can provide people by getting
 7 injured when they are picking cans, bottles from the
 8 street or in the trashcan.
- 9 Ms. O: (2.5) Are you saying you could provide for people?
 10 (2.0) ((slight nod from Maria))
 11 Read that last one again, I missed that one word.
- 12 Mari: Provide, provide people by not getting injured.
- 13 Ms. O: Let me see the word?
 14 (2.0) ((Maria points to the word in the "reasons" column of her
 15 notebook)) (4.0)
- 16 Ms. O: Are you trying to say - What are you trying to say there?
- 17 Mari: Like to, (2.0) for people to not get hurt (2.0)
- 18 Ms. O: And how does that support your argument?
- 19 Mari: 'Cuz like, (1.0) cuz some people, they throw, um, bottles and

- 20 cans on the [street,
- 21 Ms. O: [Uh huh. ((Ms. Olvera nods))
- 22 Mari: So some people are like walking and
- 23 they trip on the bottles on the [street
- 24 Ms. O: [Uh huh. ((Ms. Olvera nods))
- 25 Mari: And they try to recycle those.
- 26 Ms. O: Uh huh. And is that a good thing or a bad thing
- 27 that they are picking up the bottles from the street?

At line 9, Ms. Olvera responds with a candidate understanding of Maria's sentence: "Are you saying you could provide for people?" What is notable about this response is that it takes the word "provide" as intended, while inserting the correct preposition (for). After 2 seconds of silence, Maria responds with a slight nod, apparently confirming her original use of "provide", whereupon Ms. Olvera pursues the possibility that Maria's use of provide was the product of a reading error. It is noticeable that in offering Maria the opportunity to re-read and perhaps correct her previous response, Ms. Olvera accounts for her request in terms of *her own* failure to hear what Maria said (line 11). In effect, Maria has been offered a "no-fault" opportunity to fix what might otherwise be construed as an error in speaking or reading (Drew, 1981).

In her subsequent response (line 12), Maria repeats the previous sentence with minor alterations while preserving her previous usage of the word "provide". At this point, Ms. Olvera asks Maria to point to the word in her notebook and Maria complies (lines 13-15). Ms. Olvera can now know that Maria has made a clear language error. At this juncture, Ms. Olvera must choose between continuing with the primary focus of the session (assessing Maria's understanding of arguments, counterarguments and reasons) or correcting the English language error. Her next turn vacillates between these two alternatives (line 16). Her first attempt "are you trying to say?" is abandoned just before she reaches the target replacement word (possibly "protect"). Changing course at the last moment, Ms. Olvera attempts to elicit an

alternative gloss from Maria that would at least temporarily elide the problem and permit the main objective of the session to remain the focus. This attempt is also inconclusive (line 17).

Subsequently, Ms. Olvera decides to let the error pass and, treating Maria as having articulated a satisfactory English sentence, she explicitly focuses on one of the main learning goals – connecting reasons with the argument. Notably here, Ms. Olvera begins her question with the word “and” (line 18) thus building her question as part of a coherent and continuing conversational sequence (Heritage & Sorjonen, 1994).

In terms of formative assessment, Ms. Olvera’s purpose in the interaction was to find out where Maria was in relation to the development of her arguments, counterarguments and reasons with the purpose of moving her work forward. However, her questioning of Maria revealed an unexpected vocabulary error. Her formative questioning identified Maria’s problem as one of English language vocabulary rather than one of misspeaking or misreading and, in the process, offered Maria at least three opportunities to fix it. Facing the choice between fixing the vocabulary error and focusing on the main learning goal, she chose in favor of the lesson goal. Having made a note of the error for future use in instruction, she then provided a segment of instruction to assist Maria in accomplishing the writing goal (Heritage & Heritage, 2011).

Ms. Olvera used the interaction as an opportunity for formative assessment and her responses, both in the moment and subsequently, were contingent upon what Maria revealed about her learning during their conversation.

Students’ Role in Formative Assessment

To this point, we have focused on teacher actions in formative assessment. However, Sadler’s model places great emphasis on students’ capacities to monitor their own learning as, in effect, a separate but complementary feedback process. Sadler (1989) stressed that to be able to engage in self-monitoring students must come to hold a conception of quality similar to the teacher’s, and that developing this conception depends on understanding the goal of learning, being able to monitor learning as it develops,

and engaging in action that leads to some closure of the gap. In practice, this means that students are clear about the targeted learning by understanding the articulated learning goals and performance criteria. This enables them to engage in metacognitive activity during the lesson, using the performance criteria to evaluate their learning against, and make adaptations to, their learning strategies and tactics when they judge the need to do so to make progress (e.g., Glaser, 1998; Paris & Winograd, 2003). It is the role of teachers in formative assessment to assist their students to become equivalent stakeholders with the right and obligation to play a significant role in reflection and analysis about their own learning, and in decision-making about next steps (Heritage, 2013). Providing structures and systematic opportunities for student reflection during the course of teaching and learning, as well as routine *opportunities to use* feedback from teachers and peers, are factors in how effectively students are able to participate as self-directed agents in the learning process. The capacity of students to engage in metacognitive activity is dependent on students being considered as cognitive agents by their teachers who are able to take action to advance their own learning.

In sum, formative assessment is a dynamic, iterative process involving both teachers and students in contingent pedagogy and learning. Its unique characteristics of collecting and acting on evidence while learning is in development to enable contingent scaffolding and feedback make it particularly powerful for developing both the linguistic and cognitive capacities of ELL students during content area learning.

The goal of having accomplished teachers who use formative assessment as an integral part of their daily teaching in schools is both desirable and realizable. In the next section we discuss the nature of teacher expertise for engaging in formative assessment with ELLs.

Developing Teacher Expertise to Use Formative Assessment Contingently

The development of teacher expertise in formative assessment is predicated on teachers being offered multiple, on-going, and coherent opportunities to develop their expertise so as to be able to carry out their work in significantly different ways than they currently do. Formative assessment practices require a keen, observant eye to understand the moment in order to build the future. They also require

teachers' deep understanding and "pedagogical tact" (van Manen, 1991), the ability to act in open-minded ways that, while being honest and compassionate, have students' interests and learning as their goal. These complex pedagogical abilities cannot result simply from a course in teacher education; rather they are built over years of observant, reflective, and supported teaching. Formative assessment has to be modeled, discussed, nourished, problematized, and the teachers' understanding of it deepened over a life of reflective practice. If appropriate learning opportunities are provided to teachers, they will be able to notice indications of progress in productions that – because they come from students who are developing conceptual and literacy skills, and a second language required to express them- may be flawed or imperfect. By noticing this progress amid imperfection, teachers, alongside their students, will be able to determine and support the direction of next learning.

As we have noted, the adoption of CCSS by a majority of states has required a number of major shifts in the way second language learners are educated in schools. One example of these required shifts in pedagogy is to have teachers worry less about whether students are using language in formally correct ways and to focus more on whether their ELLs understand concepts and processes, and can act upon them successfully from the point of view of being able to accomplish academic acts using language. In the process, teachers need to resist their "apprenticeship of observation" (Lortie, 1975), which has taught them to evaluate their students' performance not for content but for form and to point out to their students the linguistic errors they commit. To make this major conceptual and practical shift possible, formative assessment must become an essential teacher practice, enabling teachers to understand the uncertainties that characterize students' conceptual, academic, and linguistic development in order to scaffold and promote next lines of development.

Teacher Expertise to Use Formative Assessment with ELLs

What is the deep understanding that teachers need to develop in order to offer their students productive opportunities to learn both in planned and contingent ways? Lee Shulman's (1995) model of teacher understanding underscores the complex knowledge, beliefs, and actions that inform accomplished

teaching and its signature trait in action, formative assessment. The model includes six dimensions that generate accomplished teaching. Adapted to account for teacher expertise in intercultural, multilingual contexts (Walqui, 1997) these domains include:

- Vision: teachers' ideologies, objectives, and dreams, all of which impart a sense of direction to their students' learning.
- Knowledge: cognitive understandings that inform instruction, among them subject matter knowledge, pedagogical knowledge, pedagogical language knowledge (Galguera 2011), pedagogical subject matter knowledge, knowledge of students, knowledge of self.
- Practice: teachers' skills and strategies for enacting their goals and understandings of their teaching. Formative assessment is a signature element of this domain.
- Reflection: teachers' ability to make sense of their actions in classrooms by engaging in – among other activities – planning, remembering, evaluating and contemplating.
- Motivation: reasons, incentives, emotions that give energy and meaning to teachers' visions, understandings and practices.

Pedagogical language knowledge, referred to above – “understanding the ways in which language is used to represent knowledge in classrooms as well as the power and status differences encoded in language” (Galguera, 2011, p. 90) – is a key factor in teachers' ability to engage in formative assessment with second language learners. With such knowledge teachers can focus on the ultimate goals of lessons, and appreciate development in action, including the acceptance of temporary infelicities that do not impede communication, and which can be worked on subsequently or in the near future.

With well-developed pedagogical language knowledge, teachers understand and teach language not as discrete grammatical or lexical forms or as isolated communicative functions, but rather as action, and more often than not a form of joint social activity. Activities are things that learners do, for particular purposes, in specific contexts, together with other learners, and with certain outcomes (van Lier, 2011). Within such an activity or series of activities, *linguaging*, occurs. Linguaging is an activity that is emergent, always under construction, not a finished product or a fixed code. It is precisely this “under construction” nature of emergent language that makes formative assessment pivotal, since it determines

what opportunities to learn the learner needs to be offered next. Languaging also presupposes that teachers and students work *abductively*, observing what may happen as they try out communicative options to see if actions are accomplished as they experience new uses of language. If student actions fail, teachers can then work with students *deductively*, giving them grammatical rules of thumb (not extended grammatical explanations), or *inductively*, providing examples to students so that they derive rules. In the language class, it is more profitable to start with abduction, which is experiential and exploratory, and move on to inductive and deductive tasks contingently, followed perhaps with further exploration at a wider or deeper level and so on, cyclically. Effective formative assessment practice enables teachers to know when student languaging actions are not successful so they can take appropriate action to support their students.

Let us explore this process using an example of personal narratives. What understanding do teachers need to have about successful engagement in a personal narrative? An essential consideration is that the speaker or writer understand that the purpose of this type of genre is to convey a personal experience so that the words used powerfully convey the event in order to inform, teach, or embody the writer's reflections on the experience (Derewianka, 1990). Considerations of audience – part of the context of the interaction – are also essential. If the story is being told to a child, the narrative will be shaped differently, probably including more explanations, than if it is told to a teacher.

In terms of organization or structure of the text type, a narrative usually begins with an orientation, where the writer sets the stage for the development of the story. An atmosphere is created and there is some foreshadowing of the actions to follow, which is used to draw readers into the story and invite readers or interlocutors to become involved. Actions are typically presented in a sequential order, building up to a complication and typically ending in a resolution. Considering the specific form of the language to be used, audiences will expect that narratives will use action verbs, typically in the past tense, and that actions be linked by expressions of time and sequence. This broad understanding of narratives helps inform teachers of what is essential to develop in an ELL's production of a narrative, and what can wait to be developed next. Without this knowledge of what features of a text are more salient than others,

teachers cannot engage in the contingent, “just right for the moment” decisions that characterize high challenge/high support teaching (Walqui & van Lier, 2010; Gibbons, 1993).

An Example of Practice

Let us consider a classroom example of a teacher’s response to a student narrative. In her powerful book about a tragic clash of cultural values in California’s central valley between locals and Hmong refugees, Anne Fadiman (1997) relates an incident in an eighth grade class. The teacher has asked her students to write an autobiographical narrative. May, a Hmong student in the process of developing English, writes a harrowing account of her family’s escape from their village (the text is as the student wrote it):

On our way to Thailand was something my parent will never forget. It was one of the scariest time of my life, and maybe my parents. We had to walked by feet. Some of family, however, leave their kids behind, kill, or beat them. For example, one of the relative has tried to kill one of his kid, but luckily he didn't died. And manage to come along with the group. Today, he's in America carrying a scar on his forehead.

My parents had to carried me and two of my younger sisters, True and Yer. My mom could only carried me, and my dad could only my sister. True with many other things which they have to carry such as, rices (food), clothing, and blankets for overnight. My parents pay one of the relative to carry Yer. One of my sister who died in Thailand was so tire of walking saying that she can't go on any longer. But she dragged along and made it to Thailand.

There was gun shot going on and soldier were close to everywhere. If there was a gun shot, we were to look for a place to hide. On our trip to Thailand, there were many gun shots and instead of looking for a place to hide, my parents would dragged our hands or put us on their back and run for their lifes. When it gets too heavy, my parents would

tossed some of their stuff away. Some of the things they had throw away are valuable to them, but our lives were more important to them than the stuffs.

“You have had an exciting life!” wrote her teacher at the end of the essay, “Please watch verbs in the past tense.” (Fadiman, pp. 154-155).

Instead of the response the teacher made, effective formative assessment would have involved the teacher in identifying what May already understood about personal narratives – purpose, sense of audience, orientation, foreshadowing, actions sequentially presented. She would have provided feedback to May to help her understand how she had worked effectively worked with the narrative structure. This feedback could have supported May to reflect on her learning and deepen her understanding of narrative. At the same time, the teacher would have decided what was on the cusp of development, May’s use of the past tense, for example. She could then focus on areas for future development, and choose one to work on jointly with the student. As discussed before, the teacher’s task should be to grasp relevant elements of indistinctly presented cognitive structures and language forms to assist in establishing them more securely. In the example, lacking pedagogical language knowledge, May’s teacher asks her to work on her use of the past tense, which she finds erroneous. In fact, it may be argued that May’s errors reveal that she has learned a rule for past tense use – add an ed ending to verbs – but she has overgeneralized it to cases where the rule does not apply. When accompanied by auxiliary verbs in the past, main verbs need to go in the present simple form. This is a complex rule to learn, and one that the teacher could, with effective scaffolding assist May to acquire. It may also be noted that such a response would focus on May’s next steps and permit an individually-sized approach to as opposed to the all to often one-size approach for ELLs.

According to Galguera (2011), a second aspect of pedagogical language knowledge involves teacher awareness – and consequent actions – of how language is used to express power and status differences. Initially in a class there is a powerful asymmetry between teacher and students in terms of power and status. As the academic year unfolds, this asymmetry needs to be restructured to create

democratic, validating, dialogic environments where ELLs feel invited and encouraged to develop their voice, their knowledge, their ability to act. In the Fadiman vignette May has shown immense courage to describe painful family experiences to a teacher. She deserves to have her teacher go beyond merely validating what she understands and can act upon academically. She also deserves that her teacher be open to her in a way that makes her growth possible. As van Manen (1991) observes, in teaching it is often the unsteady, unstable, inconstant, variable moments that require tactful action of a sort that is essentially unplannable; “And these unstable moments are no accident in teaching, but rather are essentially an integral part of teaching...But even though tact is unplannable, one can prepare for it, one can prepare the heart and mind” (p. 144). Formative assessment is about understanding the development present and future of both the intellect and the heart. As Heritage (2013) proposes, formative assessment involves attitudes, values, agency, and importantly it should be considered within a children’s rights approach to assessment.

When teachers have the pedagogical language knowledge to view grammar as part of activity, as part of a form of social action, notions such as “grammatical rule” and prescriptive “correctness” fade into the background. Instead, the focus is on perception (how the students understand the communicative act), action (how they choose to respond), and interpretation (how they understand their actions as successful or not in terms of interlocutors’ responses). In this action view of language, learner identity, agency, and engagement are equally important, since the central task in which the teacher is engaged is not only one of providing students with opportunities to learn linguistic and academic practices, it is also work that seeks to redress the minority status of second language students, and such redressing has to start in the classroom, modeled by teachers’ actions.

Formative Assessment in Professional Development

In the same way that formative assessment can be viewed as a fruitful practice in the education of second language learners, it also can and should be used in the professional development of teachers. Just as no two students are alike, no two teachers are alike either. Professional development opportunities need

to meet teachers where they are pedagogically, and provide them with just the right kinds of opportunities to expand, rethink, or build new professional understandings and practices. Teachers, therefore, need to be invited to extensive development and coaching opportunities that incorporate occasions to learn effective uses of formative assessment. Professional development on the effective use of formative assessment with ELLs is, no doubt, widely needed (cf. Trumbull & Gerzon, 2013). Indeed, the need for teachers to support both ELLs' language development *and* attainment of the rigorous CCSS requires the use of formative assessment practices that many teachers do not currently possess. However, effective formative assessment requires a level of expertise that cannot be expected of either novice or veteran teachers unless ongoing support is provided to help them interpret and evaluate – both contingently and in the moment, as well as for future lessons – where students are, what knowledge and skills they are ready to develop, and how to maximize that development. In particular, teachers also need to know how to provide deliberate opportunities for students to learn the specific language associated with the academic practices of each discipline – something that few teachers are likely to be prepared to do with either ELLs or native English speakers (Aguirre-Muñoz et al., 2006; Wong Fillmore & Snow, 2000). Formative assessment is logically a key piece of such instruction, given its potential for in-the-moment feedback, student involvement in self-assessment and goal setting, as well as follow-up modifications to instruction. To ensure that students receive effective instruction that helps them to develop the language and literacy skills they need, formative assessment must play a significant role in ongoing teacher professional development.

Effective professional development for teachers, very much like accomplished teaching, creates robust visions of destinations (long-term goals), starts with teacher participants at their current skill or knowledge level, traces responsive developmental paths, and scaffolds that development. In the process, all actions of the professional developers point to the same long-term goal help accomplish intermediate goals, and assess formatively where to go next.

In the final section of this paper, we turn to policies that we believe will support the development of teachers' formative assessment practices.

The Role of Policy in Supporting Formative Assessment with English Language Learners

We have suggested in this paper that a comprehensive and coherent assessment system must include formative assessment practices that are integral to pedagogical practice. We have also described and illustrated how teachers engaging with ELL students in well-integrated, contingently implemented formative assessment during instruction can foster ELLs' academic uses of language while they grapple with specific subject matter concepts and processes. When teachers clearly define learning goals, carefully structure tasks, and engage students in questioning and instructional conversation, students are more likely to receive "just right" feedback, reflect on and further extend their thinking using language, build confidence, and experience self-efficacy as learners. Teachers get to probe student thinking, uncover misconceptions and emerging insights, as well as observe linguistic features and disciplinary discourse patterns in development, and respond in ways that can guide or draw students forward in their language and content learning. They also can reflect on student responses and other learning evidence as feedback to inform and improve their own pedagogical practice.

A consensus is emerging among educational researchers on the importance of formative assessment in fostering the kinds of competencies exemplified in the new CCSS and NGSS. For example, a recent National Research Council committee report on developing "deeper learning" of transferable cognitive, intrapersonal, and interpersonal knowledge and skills needed for the 21st century, cites teacher use of formative assessment as conducive to and playing a key role in developing these competencies in students (NRC, 2012, pp. 178, 188). The Gordon Commission's recent report on the future of assessment in education also acknowledges the importance of closely integrating assessment with curriculum and instruction to make assessment information more actionable for formative purposes (Gordon Commission, 2013, p. 131). However, the Commission also notes that formative assessment needs to be applied in equally valid and effective ways across different student populations, and warns against resource disparities that could result in differential application of formative assessment in ways that increase achievement gaps among population groups (p. 133). This concern is particularly germane to

ELLs, who have been traditionally underserved and who often attend under-resourced schools staffed with higher proportions of underprepared teachers (Gándara et al., 2003).

What role can policy and policymakers play in supporting good formative assessment practice for English learners? The final section of this paper briefly sketches some ways in which policymakers can – and in some cases are beginning to – concretely support teacher formative assessment practices with ELLs.

Formative Assessment and Its Place in a Balanced Assessment System

As Orland and Anderson (2013) note in their recent policy brief on assessment for learning, the “growing rhetorical commitment” to balanced assessment systems provides a real opportunity to support integrated and coherent formative assessment practices in classrooms nationwide. But they also note that this is largely dependent on policymakers’ being clear on what formative assessment means (i.e., not confusing it with interim/benchmark assessments of student growth); seeing classroom-based formative assessment as part of – rather than apart from – next-generation state assessment systems; and exerting strategic and sustained leadership to foster it (pp. 5-6). These points are worth pausing on briefly given the well-documented confusion between formative assessment as pedagogical practice, and assessments (measurement instruments) administered for formative purposes (Shepard, 2000, 2005).

Formative assessment is, like all assessment, a process of reasoning from evidence (NRC, 2001). As we have illustrated throughout this paper, what makes formative assessment distinct from other forms of assessment is the nature of the evidence gathered, its proximity to learning, and the use of evidence by teachers and students (Heritage, 2013). Specifically, any evidence-gathering strategy used in formative assessment needs to be sufficiently proximate to learning and provide useful information that informs immediate decisions and actions by students and teachers *while learning is developing*. The focus is on work that teachers and students engage in within the student’s “challenge zone” or zone of proximal development, and on building student agency through self-assessment (metacognitive activity), peer assessment, and use of feedback. This is what distinguishes formative assessment from other forms of

assessment, and we maintain, situates it squarely within a teaching and learning rather than a measurement paradigm.¹

Substantial implications for policy flow from this understanding, since it is fundamentally pedagogical practices, and not tools or instruments, which drive formative assessment. For formative assessment to effectively foster ELLs' language and content learning, we argue that educational policy leaders and stakeholders must develop policy in two key strands. First, policy must strengthen and align teacher preparation, professional learning and evaluation in ways that value and support formative assessment practices with ELLs. Second, policy must leverage resources within the new comprehensive assessment systems to support teachers' appropriate understanding and use of different kinds of assessment information, as well as their professional development in formative assessment practice. We briefly address each of these policy strands below.

Teacher Preparation, Professional Learning, and Evaluation Policies and Practices.

Formative assessment is so tightly intertwined with instructional practice, and by extension with content knowledge and pedagogy, that policies promoting its successful implementation by teachers of ELLs must strengthen and align the systems for training, inducting, supporting, and evaluating teachers. How might this strengthening and alignment happen? We review some ideas and examples, beginning with professional development, followed by initial training and induction of preservice teachers, and then teacher evaluation policies.

Professional Development that Models Good Formative Assessment

As previously noted, teacher professional development should model effective formative assessment. In their recent review of professional development on formative assessment, Trumbull and Gerzon (2013) support this view, signaling that professional development in formative assessment needs

¹ We find the use of the plural – i.e., “formative assessments” – as one reliable indicator of when a measurement paradigm is operating.

to “model some of the broad strategies teachers will be using to carry out formative assessment in their classrooms” (p.6). For example, they highlight numerous professional development models of formative assessment that build a professional learning culture focused on key problems of practice. These models respect teachers as professionals and help define their learning trajectories; use coaching and facilitating discussions to help teachers use evidence of learning during instruction, and attend to teachers’ content knowledge as they develop formative assessment practices; and encourage teachers to reflect on their practice and develop their own ways of engaging students in inquiry. These are precisely the kind of stances teachers need to take with respect to empowering their students as learners. Importantly, these authors warn against “homogenizing” formative assessment down to “a set of technical practices abstracted from the instructional context,” and remind us that “the very power of formative assessment lies in its contextualization, its being tailored to specific students’ learning within specific domains at particular points in development” (p. 24).

In addition, as Santos, Darling-Hammond, & Cheuk (2012) note, educators of ELLs need to “understand deeply the core areas of the disciplines and the learning progressions that operate within the domains of each discipline,” so that formative assessment can “help them understand where students are in relation to the learning continuum” (p. 3). For teachers of ELLs in particular, they argue for instruction that addresses language progressions, demands, scaffolds, and supports. This includes progressions in learning domain-specific language needed to understand disciplinary concepts and express ideas about them; and designing tasks that consider the disciplinary language demands for specific content and topics, and that scaffold both comprehension and student production of language to express ideas. They provide several examples of how schools and districts can build support structures to apprentice teachers to these new practices, and facilitate learning communities staffed by language and content experts that support cross-role and job-like teams from schools and an engagement structure supported by the district.

Teacher Preparation and Induction

For initial teacher preparation, Santos et al., (2012) argue that pre-service teachers need to develop a foundational understanding of “content pedagogy that incorporates an understanding of the language of the discipline(s),” as well as of “language development strategies for teaching English learners, preferably with applications within the disciplines they will be called upon to teach” (p. 5). They also argue for a “clinical curriculum” that directly ties pre-service teacher coursework to fieldwork, so that teacher education classes “engage novices in assessing students, designing lessons, trying out strategies, evaluating outcomes, and continuously reflecting with expert guidance on what they are learning” with cooperating teachers and supervisors chosen for their ELL expertise (p.6).

In recognition of this intertwining of discipline-specific language uses with content practices exemplified in the new standards, “pedagogical language knowledge” (Bunch, 2013; Galguera, 2011) has recently been conceptualized as a new domain of preparation similar to Shulman’s (1987) “pedagogical content knowledge.” Bunch reviews several teacher preparation and development approaches that cultivate such pedagogical language knowledge, and identifies their key commonalities: A focus on language as “an essential mediator of teaching and learning rather than as either a discrete curricular target...or solely a means to communicate the content one has already learned;” their “fostering ELs’ use and development of linguistic resources for learning and demonstrating learning across the curriculum;” and their “helping teachers focus on how language is used differently for different audiences and purposes, both within and across different academic and nonacademic settings” (p. 330).

Drawing from the literature on cultural validity in assessment, Trumbull and Lash (2013) provide an important reminder that formative assessment can encode sociolinguistic and sociocultural practices of the dominant school culture that may be less familiar to or congruent for language minority students. Not only may some ELLs be less familiar with language forms and uses found in particular disciplinary practices; they may also need more teacher modeling and time to develop skill and comfort with evaluative conversations of learning, informal questioning, or inquiry-based questioning that requires them to reason aloud on demand in front of peers. As they note, “teachers need to observe how their particular students respond to various forms of feedback in order to tailor feedback to those students’

needs” (p. 12), and so avoid misinterpretations and misunderstandings by teachers and students (Trumbull & Lash, 2013).

Teacher preparation and credentialing systems will need to recognize these important shifts in language uses within content areas and content pedagogy, connect them to the learning objectives of all preservice- and induction-level teachers, and ensure there is sufficient support, feedback, and cultivation of formative assessment practice through clinical teaching and mentorship.

Teacher Evaluation

With respect to teacher evaluation, great care must be taken to signal the importance of formative assessment practices, yet not reduce their implementation and evaluation to a checklist of “evidence-based practices” that can actually undermine authentic formative assessment practice by emphasizing “fidelity of implementation” instead of adaptation to the local context (Anderson & Herr, 2011, cited in Trumbull, et al., 2013, p. 19).

The extraordinarily narrow focus of recent policy prescriptions to evaluate teachers based largely on student test scores is now being broadened, through findings from substantial empirical research and development efforts such as the Measures of Effective Teaching (MET) project, to include a more balanced set of multiple measures (MET, 2013). Such measures include multiple observations of teacher practice over time by trained peers with opportunities for actionable formative feedback and self-reflection. Importantly, they also include student perception surveys that both “reflect the theory of instruction defining expectations for teachers in the system,” and that elicit student responses to their experience of teacher expectations, support and feedback (MET, 2012, pp. 4-6). This careful incorporation of student feedback into teacher evaluation not only affirms the rights of students to a learner-centered assessment process (Heritage, 2013), but can also strengthen reciprocal accountability for instructional capacity-building and expected performance needed between educational policy makers and teachers (Elmore, 2002). For example, as one MET project report notes, “student surveys are *as much about evaluating systems of support for teachers as they are about diagnosing the needs within particular classrooms*” (MET, 2012, p. 4, emphasis added).

The inclusion of these other measures in teacher evaluation policies and systems afford real opportunities for supporting implementation and scale up of classroom formative assessment practices, *if the teacher observation protocols and student survey instruments are designed to value and capture such practices, and help teachers and students improve in enacting them.*

Leadership

In many ways, several policy elements needed to strengthen formative assessment practice already exist or are under development in states. In California, for example, the California Standards for Teaching Profession (CTC, 2009) name “planning instruction and designing learning experiences for all students,” as well as “assessing students *for* learning” as two of its six standards. The elements and reflective questions found in these and other standards explicitly call for many of the hallmarks of effective formative assessment practice. Moreover, California’s blueprint for supporting outstanding teaching aligned to the new content standards call for teacher and administrator induction programs that have “formative assessment designed to promote professional reflection and growth,” and the induction program standards require “an inquiry-based formative assessment system” for candidates (Task Force on Educator Excellence, 2012, p. 44). The blueprint’s recommendations also argue that the state’s teacher evaluation system “must include both formative and summative assessments to ensure that it helps improve teaching and learning” (p. 63). Specifically, the blueprint notes that the *formative assessment of teachers* should not be seen as one-off events, but rather “a process by which knowledge about instruction continues to grow and adapt to the needs of students and the classroom context,” and provide teachers “feedback on how to improve their practice to promote student learning and guide what types of professional development opportunities will enhance their practice” (p. 63). Many of these documents, as well as state curriculum and teaching frameworks, also call for instruction that is tailored and differentiated to meet the specific linguistic and academic needs of ELLs.

What is critically needed is policy leadership that connects these different student, teacher, and administrator requirements and leverages them to promote a culture of learning for ELL students and their

educators. Such leadership can weave together these different policy strands into a more coherent fabric of clarified expectations, targeted support, and aligned resources to leverage the potential of formative assessment for improved pedagogical practice with ELLs.

Comprehensive Assessment Systems' Support

Four federally funded multistate assessment consortia are currently building new academic content assessments, as well as the next-generation English language proficiency assessments aligned to language demands of content standards (ETS, 2012). While their focus is largely on summative assessment for system accountability purposes, two of these consortia have committed to providing formative assessment resources and professional development as part of their balanced assessment systems. Specifically, the Smarter Balanced Assessment Consortium (SBAC) intends to provide both online professional development resources and “tools” to support teachers’ use of formative assessment. Also, the WIDA Consortium’s ACCESS 2.0 ELP assessment system is currently conducting research on “dynamic language learning progressions” (dllp.org), and intends to use these in formative assessment professional development resources that it will provide member states.

These two promising developments may mitigate against justifiable concerns (e.g., Heritage 2010) that formative assessment within the context of these large-scale assessment consortia could once again be co-opted and misrepresented as residing within a measurement paradigm that moves formative assessment very quickly to isolated measurement instruments or events. Consortium policymakers and stakeholders can help prevent this by 1) ensuring the consortia focus on developing educators’ assessment literacy to clarify the purposes, validity claims, and appropriate uses of summative and interim/benchmark assessments within their systems, and 2) clearly locating the professional development and related resources provided for formative assessment in close proximity to content and language pedagogy.

Regarding assessment literacy, all professional development and explanatory materials developed for key constituencies (educational policymakers, district and school administrators, teachers, parents,

students) should clearly delineate appropriate and inappropriate uses of each of the key assessment components in their comprehensive systems. For example, summative assessment results, which are used for system-level evaluation purposes, should not be used for instructional decisions regarding individual students, as these assessments are not sensitive or fine-grained enough for that purpose.

Interim/benchmark assessments that purport to evaluate learning after a period of time should be “instructionally-linked,” – i.e., the objectives tested should match those taught in the preceding time period (Shepard, 2005).

In preparing and reviewing professional development and other resources to support formative assessment, consortia should clearly define their conceptualization of formative assessment, and explicitly describe their theory of action for how these professional development and other resources are to be used to build teachers’ and students’ capacity to engage in formative assessment. In particular, consortia should explain how these resources support the hallmark practices of formative assessment. These could include developing learning goals and language progressions; strengthening student feedback, self-monitoring and metacognitive/metalinguistic reflection (particularly with ELLs at different levels of English-language proficiency); supporting teacher communities of practice; and providing videographed vignettes of developing and fully enacted formative assessment practice, among others.

The development and vetting of valuable formative assessment professional development and other online resources must be championed not only through consortium member states themselves, but also in collaboration with professional associations and multistate groups such as the Council of Chief State School Officers state collaborative networks that can foster cross-functional dialogue and alliances for ongoing policy development and implementation.

Conclusion

In this paper we have discussed the importance of effective formative assessment to ELLs learning in the context of the CCSS and NGSS. When teachers pay close attention to students’ developing language in the content areas they can take contingent action in the form of scaffolding or feedback to

support ELLs' language and subject matter learning. The degree to which teachers are able to engage in this contingent practice is dependent on their understanding of formative assessment as an integral component of pedagogy, their knowledge of content and, importantly, their pedagogical language knowledge.

We have offered potential ways forward to instantiate formative assessment more firmly in U. S. classrooms with ELLs. First, we have described the expertise needed by teachers to implement formative assessment well. Second, we have discussed the kind of long-term professional development to support teachers in acquiring expertise. Finally, we have considered some ways in which policy and policy makers can support effective formative assessment practices for ELLs.

At present, the practice of formative assessment as we have described in the paper has not been adopted widely in the U.S. We believe that this is because formative assessment as pedagogical practice is not well understood and that teachers have not had the opportunity to develop expertise in this area. Assessment within a measurement paradigm appears to be the prevailing view in the U.S., unlike many other OECD countries where formative assessment – or assessment for learning as it is often referred to – is viewed as part of effective teaching and learning.

It is our hope that this paper will provide insights into the essential role of formative assessment for ELLs and prompt discussion and action about ways to enhance teacher expertise in this area. Given the research base indicating how formative assessment, when well implemented, can enhance learning, the ELL students in our schools deserve no less.

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For more information about this paper, please contact UnderstandingLanguage@stanford.edu
 Understanding Language, Stanford University, Graduate School of Education
 CERAS 520 Galvez Mall, Stanford, CA 94305
ell.stanford.edu