Teacher Adoption of Language Learning Progressions: First Signs of Impact on Language

Development in Students with Diverse English Language Experiences

Alison L. Bailey, (UCLA),

Sandy Chang (CRESST/UCLA)

&

Margaret Heritage (WestEd)

Objectives

Learning progressions in the area of language development hold promise for improving the language and content learning of all students and English language learners (ELL students) in particular. This paper describes the first signs of impact on student language development in response to their teachers' adoption of language learning progressions that are based on empirical data generated from a corpus of student oral language productions. The progressions of language features have been designed to assist teachers in gauging characteristics of student language and to ultimately guide their planning and moment-to-moment instruction, in other words to assist in their assessment *for* learning (Black & Wiliam, 1998). Here we provide initial evidence of what actually happens in the classroom in terms of the routines of six elementary teachers who used the progressions for formative assessment purposes with students from diverse language backgrounds.

Perspectives

Learning progressions of language development can provide greater specificity of growth in language than language standards, and are analogous to progressions that are gaining a great amount of momentum in academic content areas such as mathematics and science (e.g., Clements, & Sarama, 2009; Daro, Mosher, & Corcoran, 2011). Unlike end-of-grade level standards, progressions are not prescriptive, rather, they convey a sequence of "expected tendencies" in student learning along a continuum of developing expertise (Confrey & Maloney, 2010). Moreover, progressions derived from a new longitudinal corpus of oral language productions can provide an empirical basis for teachers' understanding of their own students' language development (Bailey & Heritage, 2014). Language samples had previously been collected for the Dynamic Language Learning Progressions (DLLP) project from 324 elementary (K-6 grade) students with diverse

language backgrounds (both ELL students with a wide range of English proficiency, as well as English-only and proficient students). Across a period of several months each student provided a number of language samples in the context of providing explanations of both academic tasks (mathematics word problems) and a personal routine (teeth cleaning).

To date, we have examined the impact of the derived language progressions for oral explanation on elementary teachers' practices with formative assessment used for instructional adjustments to student needs (Heritage, Chang, Jones, & Bailey, 2014; Heritage & Bailey, 2015). However, a theory of action for the effectiveness of adopting language learning progressions must include both teacher *and* student outcomes, specifically student response to instruction and feedback that moves their language learning forward (see Figure 1).
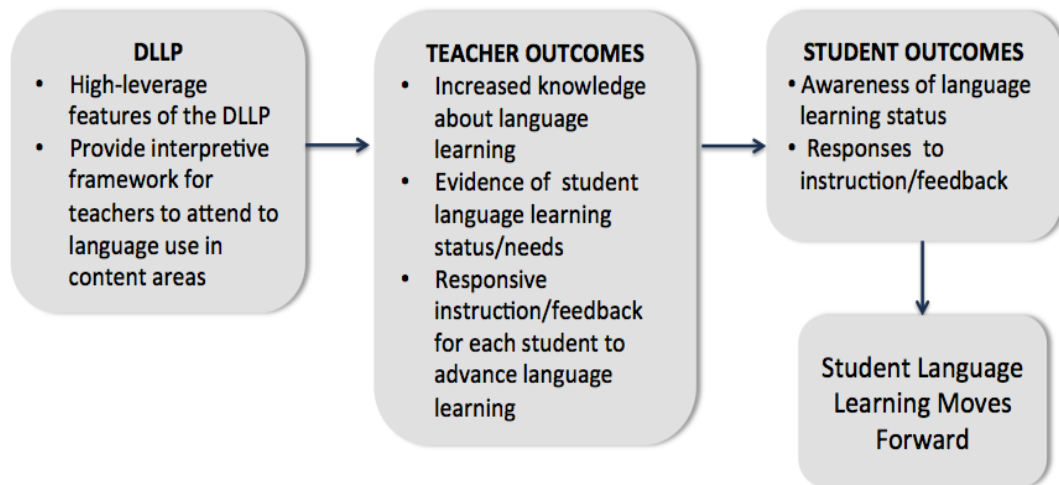

Figure 1. Theory of action for the DLLP (Bailey & Heritage, 2014; Heritage, Chang, Jones & Bailey, 2014).

The current study first reports the stated changes to an understanding of language development and the course of progression adoption by a sample of six teachers over a period of

ten months. We also attempt in this section of the paper to characterize the nature of the routines they established in order to incorporate the use of language learning progressions into their classroom practices with formative assessment. Second, the study describes the first signs of impact of these practices on students' language development as reported by their teachers.

The DLLP approach to instruction and formative assessment

The DLLP approach is a means to assist teachers to gauge the characteristics of the language features of explanations students are producing are they engage in learning language and content simultaneously. Such assistance to teachers is particularly timely given that new content standards now place more emphases on students' abilities to communicate their understanding of content (Council of Chief State School Officers, 2012). Such emphases may be particularly challenging to ELL students who are simultaneously acquiring new content knowledge and an additional language. The DLLP acts as an interpretive framework so that as teachers are being attentive to students' language use during content area learning, they can map what they hear back to the DLLP with its articulation of the phases of development based on the corpus of student oral language samples to make a judgment about where their own students' language learning lies on the continuum; that is, determining *the best fit* on the progression for describing a student's current language status.

Specifically, the DLLP supports teachers in gathering evidence of student language learning in academic settings. The formative process can include such practices as: planning new language learning experiences, making immediate instructional adjustments, and providing feedback (Bailey & Heritage, 2008; Heritage, 2013).

In summary, with the information generated by placing students on a progression, teachers can engage in contingent pedagogy, building on individual student's current language to advance

language learning within whatever pedagogical tradition or theoretical perspective a teacher prefers to adopt (Bailey & Heritage, 2014). As a result, teachers will be more able to effectively meet the ongoing language learning needs as students engage in discipline-based learning.

The DLLPs for oral explanation are organized by discourse-, sentence-, and word-level characteristics and comprises key features that were selected because of their role in prior research on language in academic contexts (e.g., Bailey, Butler, Stevens & Lord, 2007; Christie, 2012; Halliday & Martin, 1993; Schleppegrell, 2004; Scott, 1988; Verhoeven & Perfetti, 2011). The features of the longitudinal corpus of student language samples were subjected to extensive linguistic and/or discourse analysis and were ultimately placed into four phases of development: *not yet evident* (i.e., not used by a student), *emergent* (i.e., intermittent use, inaccurate), *developing* (i.e., greater frequency of use, broadening repertoire of forms but could still be used inaccurately) and *controlled* (i.e., broad repertoire of forms and accurately used most of the time). Specifically these features comprised:

- *Sophistication of topic vocabulary* (a small core topic vocabulary progressing to a more extensive topic lexicon and use of precise and low frequency topic vocabulary)
- *Sophistication of verb forms* (simple tensed verbs progressing to inclusion of gerunds, participles, and modals [auxiliary verbs such as *should, might* conveying probability, obligation, etc.])
- *Sophistication of sentence structure* (simple sentences progressing to complex sentences)
- *Establishment of advanced relationships between ideas* (limited repertoire progressing to a expanded array through the use of causal, conditional, comparative, and contrastive discourse connectors)

- *Control of perspective-taking* (no perspective-taking abilities progressing through the maintenance of appropriate personal pronouns)

- *Coherence/cohesion* (limited attempts progressing to the use of temporal connectors and different cohesive devices)

- *Expansion of word groups* (limited repertoire progressing to an expanded array including derived words, nominalizations [nouns formed from verbs or adjectives, e.g., *multiplication, goodness*], adverbs, adjectives, relative clauses, prepositional phrases, and general academic vocabulary)

- *Stamina* (no elaboaration or lacks meaning progressing to a clear mental model with use of sufficient detail and elaboration for the listener to readily make meaning)

Figure 2 captures how the features progress irrespective of feature-specific characteristics, that is what aspects of development cut across the features to holistically describe performance at each phase of the progression.

Cross-cutting DLLP Performance Descriptions

DLLP Not Evident	DLLP Emerging	DLLP Developing	DLLP Controlled
• Feature not yet detectable (or not used productively) • Student explanation is in a language other than English	• Feature appears infrequently/ intermittently or largely incomplete • Feature may be used accurately or inaccurately (errors or omissions)*	• Feature appears more often or more complete • Feature may be used accurately or inaccurately (errors or omissions)* • A small "repertoire" for the feature is evident	• Feature appears complete • Feature is most often used accurately • A broad "repertoire" for the feature is evident

* Language may be "flawed" production during these acquisition stages (Valdés, 2005)

Figure 2. Cross-cutting DLLP performance descriptions

Figure 3 is a representation of development along a progression that we have created for use with students in a pilot study of their self-assessment. The protocol guides students to notice (listen to) DLLP features in other students' explanations and locate them on the progression board and then locate the best fit for their own location on the progression board. Notice that the progression stages involve not just an increase in amount of a feature but also an increase in complexity (leaves developing a system of veins; the flower developing intricately arranged petals). Moreover, the roots become more complex and extensive and are included to remind us that while there may be much that we don't see (hear) in a student's language sample, language is nevertheless developing possibly undetected and unmeasured.
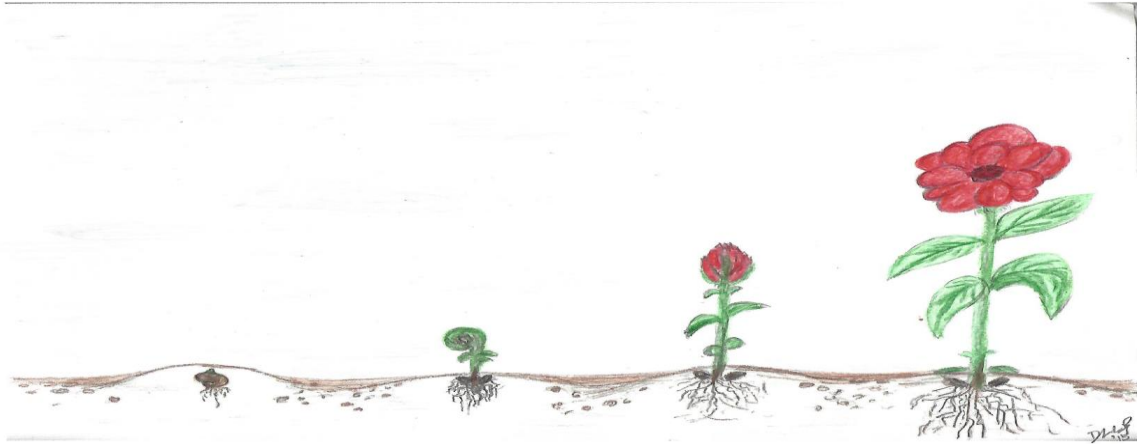
Figure 3. Representation of DLLP phases from *Not Yet Evident* to *Controlled* (used as a student self-assessment progression board).

Method

The current exploratory, qualitative study traces the course of teachers' understanding of language development, their progression implementation practices and routines, and their reports of the up-take and growth in student language in the areas on which the learning progression focused the teachers' attention.

Participants

Six teachers (all female) from one demonstration elementary school participated in one introductory session and six subsequent focus group sessions over a ten-month period. Their teaching experience ranged from four to 21 years and they taught in kindergarten, 1st/2nd grade combination, 3rd/4th grade combination, and 6th grade classrooms. Three of the teachers taught in the school's dual-language immersion program, a strand which is an option for families within an otherwise English-medium instruction school. The dual-language immersion program enrolls initially Spanish-dominant students, English-dominant students and bilingual Spanish-English students, and is based on a two-way or dual-language immersion model that develops oral

proficiency and literacy skills in the two languages for all program students. The remaining three teachers taught in English-medium instruction classrooms although their classrooms also contained students with diverse linguistic experiences—English-monolingual, ELL students and English proficient (former ELL) students.

Procedures

Focus group sessions between the research team and the six teachers addressed the teachers' experiences with integrating the language learning progressions into their mathematics, science, and language arts teaching in their own manner. Over the course of the session teachers brought not only their reflections to share but spontaneously brought with them student artifacts and audio recording of student oral language. These were then expressly requested by the research team in the later sessions.

The research team opened the conversation at the sessions with very general queries about how the teachers had been implementing the DLLP language features and collecting evidence of student learning in the intervening month between sessions. For example,

Margaret: How easy or how hard was it to attend to these languages features? Did you have to relisten or sort of dig around…?

Margaret: What do you think Ms. R. How did you find this? Why don't you talk about what you did with this one [chosen language feature]?

Because we were concerned to get more than just a general report of progress, we were conscious of asking questions to follow on from the teachers' responses and to probe for specific details and contexts of implementation and evidence of student progress. For example, the following lengthy exchange between the research team members and Ms. H not only clarified the teacher's prior comments about the type of sentences her kindergarten students' were producing

but the multi-part interaction also revealed the instructional context in which she elicited more

elaborate responses from her young students during a regular "Morning Message" routine.

Sandy: Complete sentences? Were they mostly simple sentences?

Ms. H: Yeah mostly simple sentences.

Sandy: And this was all oral?

Ms. H.:   Oral dialogue.

Sandy: So were you transcribing?

Ms. H.:   Yes and we have this big projector so they can see me writing their language, and

                 they're like glued to that. That seeing their language on the...

Margaret: Oh I see, so you're transcribing as they're saying it?

Ms. H.:   And they can see me writing their words. Some of them like more words so they'll
                 say more. And it's an interesting motivation. Yeah all of these are from large
                 group discussions.

Anne: Is that something you usually do?

Ms. H: Yeah, I usually have. And we're doing more of transcribing. We do that regularly,
                 in terms of dialogue. Discussions. But this is… we're going more transcribing it a
                 lot more.

Margaret: Why are you doing that, particularly?

Ms. H.:   Just document. Just having move control documenting and processing. So in
                 terms of the morning [morning message routine], I'm finding is that there they're
                 having a hard time with complete sentences. I get more of… I'd say 10 percent I
                 get a complete sentence. When we're having discussions around feelings. The first
                 thing is like "happy," "sad". Inserted "I feel happy because…." The goal is to
                 always to get from "I..." and give me a reason why. So that's the goal. But we're
                 not there yet.

We also engaged in a lot of paraphrasing and recycling of the teachers' own explanations and

descriptions to ensure we understood their practices and routines accurately, as the following two

exchanges between the teachers and research team members both illustrate;

Alison: I want to clarify, Ms. G. So you started off expressing the different connectors, the temporal, causal, and so on, but then you talked about teaching to these prompts. I'm just wondering, how you relate the two. So is it teaching to the connectors?

Ms. G.: No.

Alison: So you are using the prompts as an opportunity to generate some language?

Ms. G.: Right. Right, the prompts are used to generate oral language, and hopefully some writing.

Alison: And then you're looking to see…?

Ms. G.: …Within that, to see if they are using any of the causal connectors.

Margaret: And just so I paraphrase… you got some specific goals, structure goals, for children. Based on what you've heard or just pulled out of thin air or what?

Ms. G: Well in your case [referring to Ms. C's report of her implementation], it was more responsive to   observations you had previously.

Margaret: So you decided on the goals based on what you previously heard?

Ms. G: But then we also have some that were pre. So in this case, when planning a weekly planning for science, for inquiry, then we thought "What would be some connectors that we thought would come up in conversation?" That then it would help us to then.

Verbatim transcripts of all sessions were open-coded to generate organizing themes for teacher

understanding and implementation of practices and routines, as well as to characterize the

reported student up-take and development of language features.

Results and Discussion

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The course and nature of progression adoption

In early meetings with the research team, teachers reported initially observing what language features of the progression were occurring in their classrooms. While they were challenged by observing language and simultaneously teaching content, they all reported increases in their own understanding of language features and development. For example, Ms. H, a kindergarten teacher in an English-medium classroom, talked about how she experienced growth in understanding language over the course of her participation in the project.

> I mean when you asked about our language, we have been more sophisticated when discussing language. We do this naturally but now we are observing and naming what we are doing. Being able to express in interesting ways how we are expanding.

Another English-medium kindergarten classroom teacher, Ms. K, talked about her growth in understanding the role of language learning progressions specifically.

> For me what I found useful is really focusing on one [language feature] and truly understanding the elements and the progression of that one and looking at how it's involved in different content areas. And then once how I feel I have a good understanding of that one and then moving onto the other one.

By mid-year, teachers were planning how best to gather evidence and plan instruction for language features. They reported a number of different implementation strategies that showed 1) an awareness of connecting language to content learning (e.g., avoiding teaching language features in isolation, addressing linguistic needs within content areas), 2) differentiating ELL students' needs (see student up-take section for an example), and 3) fostering metalinguistic awareness. For example, Ms. R-A, a 3rd/4th grade Spanish-English dual-immersion teacher, explained how she connected language to content learning in her mathematics lessons in the following manner;

> The first few minutes talk about content. The next couple of minutes talk about "Does the language really convey what I was trying to say? Does it make sense?'

Ms. G, a 1st/2nd grade Spanish-English dual-immersion teacher, also spoke about how she connected language to content learning in mathematics. In this case, Ms. G explained how she saw conditional discourse connectors fit with the mathematics content, comparing geometric shapes. In addition, in this example she reported on her students' development of *Establishment of advanced relationships between ideas,* one of the DLLP language features;

> In the last couple of weeks we have been talking a lot about conditional connectors. One of the reasons why it sort of shifted to conditional connectors, is I really felt as we were shifting to division and fractions and getting into geometry. I really felt this is it. This is a moment we can really introduce a couple of these conditional connectors and just see their application of them…. It was having them doing a lot of comparisons, having them look at shapes and comparing them…And so as they were practicing that orally I wanted to see their application again in writing.

Another implementation strategy that the teachers reported was the fostering of metalinguistic awareness within their students. For example, 6th grade Spanish-English dual-immersion teacher Ms. R, reported that she overtly taught students to use more sophisticated discourse connectors.

> I specifically talked to them about not using "so" or "and so" or "and then". So we talked about those not being used anymore because we want them to be more sophisticated.

Ms. G also reported deliberately fostering metalinguistic awareness ("*words…having them understand them and use and apply them"*). She spoke of setting "expectations for doing more" with language and reported seeing this awareness develop in her students over time as well.

> I have seen them go [from] very simple sentences to more compound complex sentences without having it being a focus. Yes, its compound sentences but it's also teaching the words that make them compound sentences and having them understand them and use and apply them in so many different contexts and then talk about them as a use within a sentence.

Specifically, Ms. G saw that as students gained a better understanding of causal discourse connectors such as *because, since* (part of the feature *Establishment of advanced relationships between ideas*) they in turn were showing signs of development in another language feature, that is *Sophistication of sentence structure*.

The teachers embedded these attempts at implementation of the DLLP approach to formative assessment in their everyday routines. For example, Ms. G. mid-way into the sessions relayed how she fostered discourse markers (temporal) for sentence frames within her usual Writer's Workshop interactions with students, first rehearsing this aspect of language (part of the *Coherence/Cohesion* DLLP language feature) with students orally and then having them use the temporal discourse markers in their writing and established this usage for both English and Spanish writing.

Ms. M. chose to embed the progression for the *Sophistication of sentence structure* feature in her science teaching, for example, a lesson on the students' observations of a creek's ecosystem.

Specifically, the steps in her routine were reported as follows:

1. Ms. M modelled sentence stems in her own language production.
2. Students were encouraged to use sentence stems (e.g., left a list of sentence stems on each student's table for use if desired)
3. Most students adopted stems (e.g., *when looking at X I notice Y; I observe Y…*) in oral sharing out following their writing.
4. For those who did need more help (e.g., ELL students who she observed could only use temporal connectors in oral productions not writing), Ms. M used small

group strategies such as collective looking at their writing to see where elaborated
sentences can be used.
5. Decides on next steps for all students (e.g., have students use different stems).

This final step in the routine Ms. M established can be viewed as an opportunity to broaden the

student's repertoires with this language feature, encouraging their language growth and being a

hallmark of the *developing* and *controlled* phases on the language learning progressions we had

established based on the empirical data collected for the DLLP K-6 student corpus.

Mrs. H. also elaborated on her own routine for supporting the acquisition of temporal

discourse markers which she reported as a shift in her usual classroom practice. In the initial

months of the study, she reported that she was "working on making complete sentences"

(*Sophistication of sentence structure*). However, she later shifted to a discourse-level focus in

order to help her students connect (in this case sequence) their thoughts and ideas (the language

feature *Coherence/Cohesion*). She shared the following steps in her instructional routine for

supporting temporal discourse markers:

1. Ms. H. selected an existing routine (e.g., Morning Message) that could be
facilitating by students discussing their up-coming day or prior events with which
they were already familiar.
2. Modelled target discourse markers (e.g., temporal sequencing words) orally.
3. Showed up in students' oral productions (e.g., the students asked each other
things like *What is your first, second, third favorite animal?*
4. Waiting to see if they will show up in writing.

The reported productions of students' own use of discourse markers may be non-conventional

and not necessarily related to sequencing information (rather the students seem to have been

asking each other to rank ordering their preferred animals). However, these first attempts can

serve to acquaint the kindergartners with the necessary vocabulary for use as discourse markers even if the execution of sequencing information still needs further development.

At a still later point in the school year, Ms. H. reported that she was interested in looking out for "sustainability" of her kindergarten students' acquisition of the progression features and she tested this out across the curriculum at other points during the school day. For example, she described expressly building on her prior routine with the Morning Message by seeing whether the students' use of discourse markers would show up in their writing right after Morning Message, and then if they would show up later in student writing of directions to make their "how to" books (and they did). It appears that these language features were not just being sustained across the day as Ms. H. had hoped for them to be, but that they were spontaneously being generalized or extended to a different modality (from oral to written discourse) and applied to a different genre as well (from the personal narratives of the Morning Message to the procedural explanations of their home-made "how-to" books).

One variation on this routine was for teachers of the older grades to have students read in the genre they were targeting during writing instruction time and to identify the discourse markers used by these authors. It is important to stress that that teachers were not teaching words in isolation but made them part of daily routines across the curriculum and students responded by spontaneously extended these features themselves.

Not surprisingly, there was evidence in the teachers' reports of their practices and routines that trial and error was involved as they adopted the DLLP approach. For example, Ms. G. had made a point of building student constructive feedback to each other into her instructional routines but she saw students backsliding during the course of the school year. They were

incorrectly using the causal connectors that they had acquired at the start of the school year for *Establishment of advanced relationships between ideas*.

Her initial routine for supporting this feature had been to "…sit in a conference with them… or [for students to] sit with their partners and give each other feedback." Unfortunately this proved insufficient:

> Even the feedback wasn't pushing them forward. It was more in terms of the content than the language portion of it. So then I thought "Wow that means then if I want to give each other constructive feedback, then the criteria would really have to change for them and it's not solely just looking at the content, but also looking at the language portion of it." So that had to change for them.

Later in the school year Ms. G., based on her close observation of the conferencing routines of the students and listening to their comments, was able to formatively assess the situation and respond by establishing a new routine. This new routine addressed the concern that students were potentially regressing in their language usage in this context. Still working with partners, she instead instructed students how to:

> ….shift whether they are looking at content or is it language. I think it's dual. The more we practice, the more we practice going over so many connectors and sentence structure, we can get students in that role where they can give each other constructive feedback.

Student up-take of language features

In later meetings, every teacher was focused on student production of the language features they were teaching and monitoring formatively. They reported student growth in the areas of both oral language and writing. Instances of reported student up-take of features have already been mentioned above in the context of describing the adoption of the DLLP features and the teachers' instructional practices. Here we characterize and described several additional teacher

comments that included claims of student up-take of the language features. For example, Ms. M,

a 1st/2nd grade teacher, noticed the following growth in student language production:

> So I saw this as a growth; instead of something simple, expanding their sentence structure a little bit more. Especially the first year: "I see rough" or "I see hard." Something simple. So this [shows the group a handout that contains more complex sentence frames such as "When looking at X I notice Y"] pushes their writing a little bit more.

Regardless of grade, students could transfer use of features (e.g., temporal discourse markers,

causal connectors) used in oral language production to their writing and vice versa. For example,

Ms. G reported how her 1st/2nd grade Spanish-English bilingual students were able to transfer

oral language knowledge to written language.

> Anyway now my focus is now's the time to take what they were doing orally, that I felt that I thought they were doing well and I was seeing their transference into their writing….

Ms. A-R also reported how her 3rd/4th grade Spanish-English bilingual students were

able to transfer oral language knowledge of discourse connectors into their written language.

Notice that Ms. A-R also includes a report of an important implementation strategy that emerged

in the teachers' descriptions of their practices: differentiating the needs of diverse students.

> As I was opening a lot of the speech [digital audio files], I saw it as I worked with them but I never went and looked at every single one and the connectors we taught and the things we stressed in the unit and whether it was present in there. Actually I was pleasantly surprised they were in there. I looked at boys and girls, EL students and really strong English students… This is an EL student: "Another reason is," "sadly," "in fact," "again." [reads aloud the list of discourse markers used by student] So just it's all over their writing….It was just really exciting to see them using them in their writing….

Students also spontaneously transferred features to additional content areas, modalities, and

languages. For example, Ms. G's 1ˢᵗ and 2ⁿᵈ grade students were able to transfer written language

knowledge into oral language production, and to another language.

> Not only have we seen an improvement with their writing but also just being able
> to articulate a thought, an idea.... Just being able to articulate and share what they
> are reading and what they are reading about, always going back and looking for
> the evidence. Just transfers over, seamless, and we definitely do it in Spanish.

Similarly, not only were Ms. A-R's 3ʳᵈ and 4ᵗʰ grade students transferring language skills

between the written and oral language domains, they were applying the skills they had learned in

English to their Spanish usage.

> So they were seeing it as a beneficial part of their writing and that was really
> exciting. Some of the things that we are working on now, I brought some
> [samples of student writing]. We were thinking about transference and seeing if it
> would transfer to their writing in Spanish.

In addition to transference from written language to oral language, and from one language to a

second, teachers reported that students acquired an understanding of how language works

(metalinguistic awareness). Ms. H described the following conversation she had with her

kindergarteners about the use of the word "so" as both a causal discourse connector and used for

emphasis at the start of a sentence.

> "Wow it's appropriate here but it's not a connector. Let's figure out a way so we
> can use it as a connector of sentences and ideas together." So then they had to
> rethink that….Sometimes they are the ones who spell out everything and they are
> the ones who utilize words.... Now I see it in their language. Orally as well.

Conclusions

While the sample is small and the results must remain suggestive at this stage of our research,

building language learning progressions based on empirical language samples appears to guide

professional development in teacher instruction and formative assessment effectively, with these preliminary results providing reports of positive outcomes for students with a wide diversity in linguistic experiences, including ELL students. The teachers' reports of their classroom contexts and student up-take provide initial insight into the potential impact of language learning progressions on students' language development in the classroom setting. In the future, we can explore in more depth the manner in which the teachers in this small-scale study adopted language learning progressions. From the current study, we do know this: the teachers used similar implementation strategies that were concentrated around an awareness of connecting language to content learning, differentiating the needs of ELL students from those of other students thus attending to modifications of instruction for these emergent bilingual students, and overtly fostering all students' metalinguistic awareness. The teachers also shared a strong bias toward wanting to attach the DLLP implementation to either existing routines or to establish new routines by which to introduce students to new languages features, assess them formatively, and respond with contingent instructional moves. Unless teachers can make new practices routine by either locating them within an existing routine or creating a new routine, the continued use and assessment of DLLP features is unlikely to occur as Gallimore and Lopez (2002) amongst others remind us with studies of the up-take of new routines in a number of different daily situations (e.g., parent adoption of reading routines with children).

It is perhaps striking that the teachers did not, over the course of the school year, choose to implement more than just a handful of the DLLP features, and some features were not taken up any teacher (e.g., *Stamina, Expanding word groups*). Elsewhere, we have documented that the teachers did not feel comfortable dealing with multiple language features and grew their repertoire of DLLP features slowly, one at a time (Heritage, Chang, Jones & Bailey, 2013;

Heritage & Bailey, 2015). The implications for professional development is both the length of time it may take teachers to adopt such an approach, as well as the need for continued investigation of how well remaining untried features can be adopted and how large a repertoire of language features a teacher can be expected to acquire for themselves (used for pedagogical purposes of course).

Student up-take of language features was intimately connected with teacher adoption of language learning progressions to the point that throughout this paper it has been difficult to split the two foci into separate reports. Nevertheless, we attempted to isolate the instances when teachers reported the successes of their implementation in terms of student growth and development. A common theme that emerged was how readily students would generalize their up-take of a language feature to a new context, either to an additional modality (e.g., oral language transferred to writing and vice versa), to a new language (from Spanish to English and vice versa), or to an additional content area or genre (e.g., personal narrative to expository/informational discourse/text). The implications of these teacher reports of student behaviors are very encouraging, suggesting students can be taught in one context but might readily transfer their new knowledge and skills to a multitude of additional situations with little or no additional instruction.

There are of course key limitations to the current study. Beyond the small number of teachers we worked with, the use of self-reported practices and the verbal report of student progress can be open to criticism. Teachers' may have felt the effects of social desirability to report positive outcomes thus making their reports subjective. Their reports may have been degraded by imperfect memory of practices, routines and student performances. However, we feel that our method guarded against some of these undesirable influences on the data we

analyzed by attempting to probe teachers to provide very specific details and encouraging them in their choice to accompany their claims of student progress with documentation (audio recordings, transcription of student oral language, written artifacts produced by students, etc.) that they frequently brought with them to the focus group sessions.

The depth of detail and self-reflection, indeed *analyses* of the students' language that were provided by the teachers should be evident in the verbatim quotations we have shared in this paper and assuage our own and others' skepticism that the teachers' self-reported practices and the students' reported progress were not wholly unreliable indications of the impact of teacher implementation of the DLLP approach. Moreover, this research method revealed important information about how teachers themselves understood language development and how to support it and these may prove critical input to the research team for taking the DLLP approach to scale with larger numbers of teachers in the future.

Our next steps will be to create an in-depth multi-participant case study using several different types of available data to complement the teacher reports used here. For the same teachers and their students, we have, additionally, observations of their classrooms, a subsequent years' worth of audio-visual data from continued monthly focus group sessions with the teachers, student standardized achievement test scores in English language arts, and other content areas, and, for a subset of students in these teachers' classrooms, teacher ratings of language and literacy proficiency and several oral and written language samples collected across a two- and-a-half-year period. With multiple measures, qualitative analyses of the language learning progressions should give us a more detailed and nuanced picture not only of what the DLLP approach to instruction and formative assessment promises—but what it might reasonably be expected to deliver.

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