



Fall 2021

Soleado

Promising Practices from the Field

La interdependencia entre plantas y animales: Creating Robotic Pollinators

by Yesenia Kelly—Dual Language Instructional Coach,
Summit School District 104, Summit, IL

Do work that matters. Vale la pena.
—Gloria E. Anzaldúa

Les voy a ser sincera, when we first started this unit of study we weren't exactly sure how we would end up putting all of our ideas, strategies, scaffolding, technology integration, and writing together. My collaborators were Yuridiana García, Jacquelyn Negrón, and Kenia Ruvalcaba

—our school's dedicated and caring second-grade dual language team. It was important to anchor our

unit in the following three pedagogical approaches: the Guiding Principles for Dual Language Education's three pillars: bilingualism/biliteracy, high academic achievement in both program languages, and sociocultural competence; Critical Race & LatCrit Theory's idea that our students' cultures and languages are strengths to be cultivated and are essential as a way to preserve community and support our students in elevating their critical consciousness and recognizing and celebrating their intelligence; and Gloria

Anzaldúa's cultural theory, where she describes the importance of speaking our truths in our native languages as a way to empower, decolonize, resist, and unite.



Second-grade students created robotic pollinators as a culminating activity for a science unit on animal and plant interdependence.

The Biliteracy Unit

This was what we started with: *Queremos que nuestros estudiantes entiendan que los animales y las plantas son interdependientes y que cada uno depende del otro para satisfacer sus necesidades*. The teachers and I began by creating pre-tests that assessed our students' skills in vocabulary, identifying main idea and details, and writing. This information would further help me, as a coach, vertically align strategies and standard expectations with other grade levels. The pretest results showed that only 15% of our students received a passing score for main idea and details, while 0% of the students received a passing score on vocabulary and writing. With our central content and language objectives established, along with our big idea and essential questions, we set forth on our experimental journey. What follows describes our process and results.

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Voices from the Field: Reflections After Pandemic Teaching

by Natalie Olague—Project Coordinator, DLeNM

As part of the Dual Language Education of New Mexico's 2021 Virtual Summer Institute, networking sessions were held to provide an avenue for educators to further develop the collegiality, respect, commitment, connectedness, and cooperation that typically occurs informally during a face-to-face professional conference. The topic for these sessions focused on reflecting on the 2020-21 school year, during which educators were challenged with teaching under unprecedented conditions. The purpose of this article is to share the information collected during these sessions in order to learn from each other and move forward with the collective knowledge and expertise of our educator community.

There were networking sessions each day of the Institute, with approximately 80 participants in total. Participants were asked to discuss in small breakout rooms their triumphs and challenges over the past year and, in looking forward to the upcoming school year, what they would "Keep, Toss, or Tweak." Participants self-selected into sessions that were focused on dual language programming, Project GLAD®, or Tribal languages. Despite these different focus areas, common themes arose in the discussions.

One common theme in the "Keep" column was the acknowledgement that many students and educators demonstrated a growth mindset throughout the 2020-21 school year. One participant noted, "I was able to do things I didn't think I was capable of doing", while another said, "even the most struggling students learned technology skills." With the change from remote learning to hybrid learning, many participants said

they had no choice but to "go with the flow" and focus on student learning. Many of the participants discussed how they focused on priority standards in reading and math and saw "academic progress comparable to a regular school year" for their students—building teacher efficacy. Participants also identified examples of how they developed instructional strategies for remote learning (e.g., moving Project GLAD® strategies to an online format while maintaining the rationale behind

each strategy and a focus on language acquisition). Another common theme in the "Keep" column was the focus on relationships, which is consistent with best practices in effective instruction for culturally and linguistically diverse students. This focus on relationships included

social-emotional learning, parent engagement, community engagement, and teacher collaboration. One participant said that they "got to see their students through another window" and that this lens deepened their empathy for each of their students. Some participants also noted that parental involvement increased compared to previous years, thanks to improved communication via technology. Increased community engagement was also noted by some participants with one example of how community members came together to celebrate students' advancement to the next grade level at the end of the year. Some participants also noted an increase in collaboration with their peers—grade-level and support teachers. There was an attitude of "we're all in this together", sharing and developing technology-based instructional strategies, as well as discussing individual student progress and support for



DLeNM's 2021 Summer Insitutes included networking sessions focused on dual language programming, Project GLAD®, and tribal languages.

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differentiated instruction. The remaining themes in the “Keep” column include authentic assessment (oral presentations) and small class sizes. The discussions around authentic assessment, especially for culturally and linguistically diverse students, were of great concern for many participants, especially given the myriad of technology-based assessments that many districts/schools adopted and required.

The themes that were identified in the “Toss” column centered on pandemic restrictions, equity issues, relationship barriers, and student-engagement challenges. Many participants were passionate about tossing out remote learning altogether. One teacher said, “I have to be honest—my biggest lesson learned is that I hope I never ever have to teach online again.” Regarding hybrid learning, one participant said, “Hybrid with concurrent teaching—ridiculous! Who came up with that?” Other pandemic restrictions like social distancing and wearing face masks were also identified in the “Toss” category, along with the constant fear of getting sick and associated traumatic experiences. One participant said that “having to work twice as hard; always modifying lessons based on changing learning environments was exhausting” and another participant noted that “teacher burnout is real.” Another theme from the “Toss” category: equity issues that were magnified during the school year. Language equity challenges were blatant thanks to the lack of online resources available in languages other than English. This reality compromised instruction in the partner language for dual language programs. One participant said, “we had to be very careful in our dual language classrooms to maintain the 50/50 split. We did the best we could, but it is up to debate.” Digital-divide matters such as connectivity and access to high-quality devices, relationship barriers with assignments serving as surrogates for direct communication, isolation, proximity, and support-service scheduling (special education, EL support) were also identified in the “Toss” category. However, the items most identified by the participants to be “Tossed” centered around student-engagement challenges. These challenges included lack of movement, distractions (at home, at day care, older siblings taking care of younger

siblings), limited peer-to-peer interactions (“it was hard to get students to be social once we shifted back to in-person”), attendance problems (students and teachers being quarantined, “losing” students when remote went hybrid), lack of participation due to heightened self-consciousness (cameras turned off), and failed technology applications (e.g., not being able to use Google Workspace to write in the Navajo language and the Project GLAD® Sentence Patterning Chart that “fell flat” when it was done online).

Despite the strong feelings about remote learning and its inappropriateness for culturally and linguistically diverse students, overall, the participants said that there were some aspects of the technology tools that they used last year that they would “tweak” and incorporate into their future in-person teaching. One teacher said, “we realize now, with some urgency, that our students are moving into a world of technology, and we have to help them navigate that world!” Technology tools that provide equitable interactive student-response systems such as Kahoot!, Pear Deck™, and Nearpod were identified as tools that would be further “tweaked” as teaching moves back to an in-person format. These applications are especially relevant for language learners because they provide a system for every student to respond during direct teaching. Those responses provide immediate formative-assessment information as a way to check for understanding and ensure that less verbal, introverted students are provided a way to interact. Other technology tools that were identified in the “Tweak” category were centered around parent communication. Tools like ClassDojo, SeeSaw, and Google Classroom provided efficient ways to integrate parents into their child’s instructional day—a critical support for culturally and linguistically diverse students. Tools that engage learners, like Jamboard, Padlet, social media apps, and Project GLAD® strategies online were also identified as technology tools to be “tweaked” for in-person instruction. Flipgrid, Blabberize, and iMovie can also be used to support students in displaying their understanding and further developing their literacy and language skills.

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Focus and Motivation in the Secondary Mathematics Classroom

by Amanda Crawford—Middle School Mathematics Teacher,
Portales Municipal Schools, Portales, NM

Focus and motivation activities engage students in the learning process and allow them to develop enthusiasm and curiosity that support the development of deeper conceptual understanding.



Eighth-grade Algebra 1 students work together on a sorting activity.

In the mathematics classroom, deeper conceptual understanding allows students to transfer knowledge to new concepts. These activities give students a voice and enable teachers to recognize students' prior knowledge and skills on an individual level. By providing these opportunities in my classroom, I can activate prior knowledge, engage students in discussion, and inspire mathematical thinking.

Focus and motivation activities are also valuable as they provide formative assessment data that helps guide instructional planning. By observing students as they engage in focus and motivation activities and listening in as they share what they

know, the teacher can gauge where students are before starting a unit. It is much more effective for a teacher to provide an activity for students to engage their thinking rather than simply stating, "remember when you did this last year?"

When I first attended the AIMS³™ math training, I was aware of the importance of focusing and motivating students in instructional settings. What I didn't realize was how much my students were missing out on because I was not planning or providing them with these opportunities. I had always viewed focus and motivation activities to be useful in an elementary setting, but never in a secondary classroom—this was new to me. The training really opened my eyes to their importance, as well as the importance of planning for authentic experiences in a secondary classroom. At first, I was overwhelmed with the idea that focus and motivation activities needed to be a part of EVERY unit. It helped to learn that they are invaluable as a way to launch a unit, and later, included during the unit as a short and sweet way to achieve a particular objective. I love using activities that remind my students of previous learnings that connect to foundational concepts. By activating their prior knowledge, students are more successful with our early lessons and have more to contribute to our Compendium (see below), a class anchor

Basics
 * A function has only one output for each input.
 (X independent input domain) (Y dependent output range)

Identifying Functions
 Mapping (matching) (6,2), (7,2), (8,-1) VS. (-4,0), (4,6), (2,7)
 Function? Yes/No
 Vertical Line Test: If it's a function, it will only pass through a vertical line once.

Function Notation
 $y = mx + b$
 $f(x) = mx + b$
 $y = 3x + \frac{1}{2}$
 $f(x) = 3x + \frac{1}{2}$

Graphs
 - tell a story
 Height (ft) vs Time (hrs)
 The hot air balloon went up quickly. Then flew for 2 hours. Then it gradually came down.

Functions
 Graphing a function rule "equation"
 1) Table
 2) Graph
 $y = 5x + 2$

| | |
|----|----------------------|
| x | y |
| -2 | 5(-2)+2 = -8 (-2,-8) |
| -1 | 5(-1)+2 = -3 (-1,-3) |
| 0 | 5(0)+2 = 2 (0,2) |
| 1 | 5(1)+2 = 7 (1,7) |
| 2 | 5(2)+2 = 12 (2,12) |

 $f(x) = |x| - 3$
 1) Table

| | |
|----|------------|
| x | y |
| -2 | -2 -3 = -1 |
| -1 | -1 -3 = -2 |
| 0 | 0 -3 = -3 |
| 1 | 1 -3 = -2 |
| 2 | 2 -3 = -1 |

 2) Graph

Patterns
 Fig. 1 Fig. 2 Fig. 3
 Fig. # | dots
 1 | 3
 2 | 6
 3 | 9
 4 | 12
 x | 3x
 $f(x) = 3x$

Linear vs. Nonlinear
 Linear: straight lines
 Nonlinear: curves, parabolas, etc.
 $y = x^2$, $y = x^3$, $y = |x|$

Arithmetic Sequence
 6, 7.5, 9, 10.5... $d = 1.5$
 $A(1) = 1^{st}$ term
 $A(n) = A(1) + (n-1)d$
 $A_n = a_1 + (n-1)d$
 $A(n) = 6 + (n-1)(1.5)$
 Recursive: $A(n) = A(n-1) + 1.5$ (where $A(1) = 6$)
 72nd term (use explicit arithmetic)
 $A(72) = 6 + (72-1)(1.5)$
 $6 + 71(1.5)$
 $6 + 106.5$
 $A(72) = 112.5$

Writing a Function Rule
 Linear: $y = 5x - 4$ and x .
 Nonlinear: $y = 4x - 5$
 The almond extract (a) remaining in a (b) jar is (decreased by) (c) each batch (d) of cookies made.
 $A = 8 - \frac{1}{2}b$

Standard: I can look for and use structure to write a function that describes a relationship between two quantities.
 Inquiry: What we know? Can the input be a negative? How do we use it in real life? Is there always a rule?
 What we don't know? Can the input be a negative? How do we use it in real life? Is there always a rule?
 The input is always multiplied by the output.

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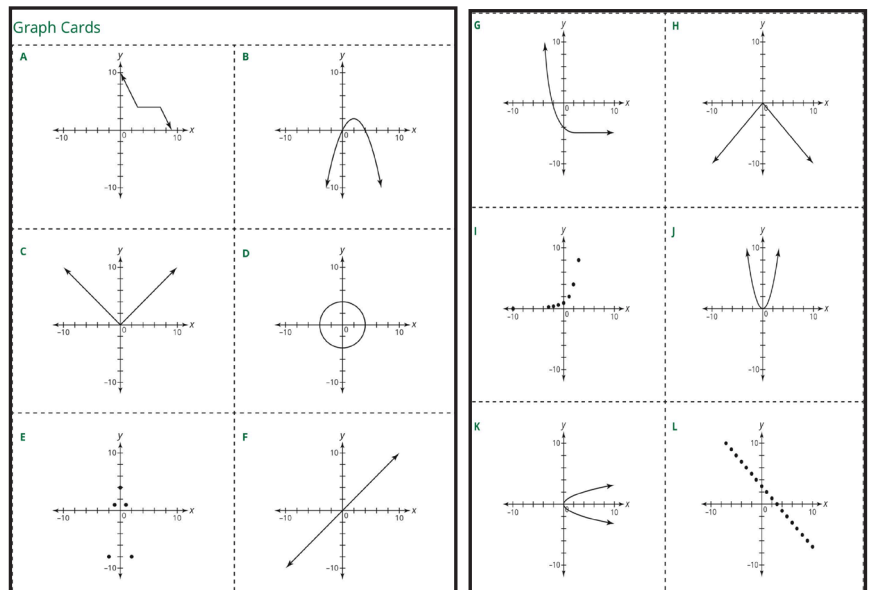
chart used by students as a reference during a unit of instruction. It includes key vocabulary, visual representations of key content, the standards, and students' inquiry questions. The answers to the questions, what do you know and what questions do you have, change dramatically after I have done a focus and motivation activity. Students are engaged, eager to share with each other, and get more excited about mathematics when they have been given the opportunity to remember the concept through a collaborative activity. I now plan focus and motivation activities for every unit.

While focus and motivation activities can take on many different forms, sorting and matching activities are a couple of my favorites because they lead to discussions within collaborative groups, lend themselves to differentiation, and are beneficial formative assessments. When students discuss and explain decisions in a collaborative setting within a hands-on, engaging activity, their thinking about the concept becomes deeper as they learn together. Sorting or matching activities involve providing students with word cards or images depicting key concepts or processes. They either sort them into categories, which can be labeled and explained, or matched in some way. An added benefit to these kinds of activities is the ease with which you can differentiate for the students in the class. One group might need to be given the headings or titles for categories in order to complete what is called a closed sort, while another group might be able to come up with the categories themselves in an open sort. By providing students with different numbers of cards to sort or blank cards to add their own examples, teachers are able to meet students at their own level. Sorting and matching activities also provide teachers with valuable information about the students' thinking or level of understanding of the key concepts, and the language needed to understand and articulate their learning. While students are working, the teacher is also able to listen to the students as a way of identifying any misconceptions that might arise. By utilizing sorting and matching activities I am able to engage students with

mathematics through purposeful conversations, leading them to become deeper critical thinkers.

What do sorts and matching activities look like in my classroom?

When introducing the concept of different types of functions in Algebra 1, I use an activity where students are asked to sort various pictures of graphs into categories. In pairs or groups, students create their own categories and reasoning behind why they grouped the graphs the way they did. The students share out their reasoning for the groupings with the entire class. As the students sort the graphs into different categories, I circulate the room to listen and facilitate discussions as needed with questions to help guide student thinking. The conversations usually lead to finding the different types of functions—linear, exponential, quadratic, absolute value, and piecewise, as well as the characteristics of continuous or discrete functions. This type of activity sets students up to have created their own knowledge of the different types of functions and function vocabulary rather than simply telling them we are going to focus on these types of functions and naming them.



Graph cards that are part of the Carnegie Learning suite of materials are used for an open-sort activity.

During the introduction to the solving two-step inequalities unit (7th Grade), I use an activity in which students work in pairs to match the simple inequalities in one variable to the picture of the number line graph.

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Student Leadership Institute: Planting Seeds for Future Leaders

by Iliana Ortiz—Student Leadership Institute Planning Committee Manager

What is the Student Leadership Institute (SLI) and why should you consider attending? My name is Iliana Ortiz and I have been involved with SLI for four years. The Student Leadership Institute is a vital part of the La Cosecha Conference. It is a chance for 8th-grade to 12th-grade students from across New Mexico and the nation to come together to network, share common cultural experiences, and learn together how to be leaders for the future. The mission of SLI is to support linguistically and culturally diverse youth to embrace language, culture, and history as a source of power and responsibility; and embrace the invitation to lead as a way to build partnerships with each other for future advocacy and the betterment of our communities.

My first year experiencing SLI was in 2018. I attended the event, which was held at La Posada de Santa Fe, as a student along with our teacher sponsor and other classmates. The theme for that year was: Gathering the Truths of our Past... Embracing our Present... Preparing our Future. It was an amazing experience meeting people from other area schools. Some students came from Spanish-speaking backgrounds, and others came from Navajo-(Diné) language backgrounds. The day included a welcome from J. Michael Chavarria, the governor of the Pueblo of Santa Clara and Chairman of the Eight Northern Indian Pueblos Council. There were fun breakout sessions and activities that allowed us to bond with each other. Supaman, a Native American dancer and hip hop artist led a session that encouraged and supported participants to embrace all aspects of our Indigenous selves. The New Mexico Dream Team presented on their work to empower

multigenerational, undocumented, and mixed-status families. I remember a fun activity where we had to make a collage out of magazine clippings that represented who we are. We all worked on our individual collages and then had the chance to share out in small groups. Different cultures and



Tertulia mentor, Moisés González shares his experiences as a documentary filmmaker with 2019 SLI participants.

languages were brought together, but nobody felt alone or different because the facilitators made sure that everyone felt included. Later, we participated in Tertulias—small-group sessions with notable community leaders who shared their stories, their advice, and their accomplishments with us. The Tertulia mentors were inspiring!

In 2019, I joined the SLI planning committee. I wanted to be part of a group that focused on helping students become leaders in their communities, bring a fresh perspective to the group, and expand our target audiences. I was certainly excited, nervous, happy, and a little afraid. I was excited to help out in any way I could; I wanted my ideas to be useful. All the members from SLI made me feel at home right away. The check-ins we did before starting a meeting helped me become comfortable in sharing my ideas. I found that it takes a lot of time and patience to create such a wonderful conference. We, as a group, had to come up with the theme, invitations, flyers, Tertulia mentors, guest speakers, entertainment, and grant money. We all chose an area to work on and would come together once or twice a month to share what were able to accomplish and what still needed to be done. We also enlisted each other's opinions and support. Our theme that year was: Strengthening our Voice and our Actions to Transform our Communities. I got to host alongside other SLI planning-committee members. As hosts, we had

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to practice several times and make sure we knew what was on the agenda. It was nerve-wracking and I was very anxious, but we made it through a great day. It was incredible seeing all the schools come out that year and enjoy SLI at the National Hispanic Cultural Center (NHCC) in Albuquerque, New Mexico. That year we welcomed Elijah Lallo and the Little Bear Necklace Dance Group, an intertribal dance group from Albuquerque, along with the Mariachi Herencia from Atrisco Heritage Academy High School (AHAHS) in Albuquerque's south valley.

Our breakout sessions included presentations from AHAHS' Spanish Honor Society and MEChA clubs, a presentation from New Mexico Highlands University on how a small school offers big opportunities for personal empowerment, social mobility, and success. Another presentation was held in the NHCC's Torreón under Federico Vigil's fresco, "Mundos de mestizaje", which maps thousands of years of Hispanic/Latino history and identity. Participants in that session mapped their own identities in creative ways, shared them with their peers, and discussed the importance of advocating for themselves and their communities. Members of ENLACE, a statewide educational initiative designed to strengthen the educational pipeline and increase opportunities for Latinos to enter and complete college, introduced participants to the six foundations of leadership and shared ways to engage with their community. Tertulia mentors were business owners like Pilar Westell of Zendo's Coffee Shop, Sarai Torres, special assistant in the Office of U. S. Senator Martin Heinrich, Nora Sackett, spokesperson for New Mexico's Governor Michelle Lujan Grisham, and artists, entrepreneurs, and advocates from across our community.



SLI participants were inspired by the fresco art at the NHCC to map their own identities.

2020 brought many changes to our planning for the Student Leadership Institute. We held our conference virtually and invited schools to join us online. It was a unique experience but we

held to our mission and succeeded in engaging with students from across the country. Our theme was: ... And Social Justice for All! Thanks to our virtual platform, we had presenters and Tertulia mentors from as far away as Utah and Arizona, and as close to home as Santa Fe and Chama. Las Cafeteras, a band out of East Los Angeles whose members met doing community organizing, provided the entertainment and a

breakout session titled: Racism: Ain't Nobody Got Time for That!



In 2020, Las Cafeteras shared their music and their community-organizing ideas with SLI participants.

SLI 2021 is in the planning stage, but I can tell you that we are planning a day to remember! I am trying to contribute more creative ideas and make SLI more "youth-friendly". I am bringing ideas to include speakers who are still in school and our age—kids who are becoming leaders of tomorrow. Expect exciting entertainment, a wider selection of breakout sessions, and so much more. This year's theme is: Planting Seeds for Future Leaders. Like La Cosecha 2021, participants can register for either online or in-person participation. More information will soon be available at www.lacosechaconference.org. I look forward to seeing you there!



Tohuehuetlahtolli, tonemiliz

Comunidades sin fronteras: Building on our Linguistic and Cultural Capital to Ensure Equity

Nihizaad baahasti!



La Cosecha

Hybrid Dual Language Conference

NOVEMBER 10-13

Join us for La Cosecha 2021 as we come together to share current theory, best practices and resources, and build networks to fuel our community's efforts for a better future for our children!

2021 FEATURED SPEAKERS



Dolores Huerta
Dolores Huerta Foundation
Community Organizer



José Medina
Dr. José Medina:
Educational Solutions



123 Andrés
Teaching Artists and Songwriters



Allison Briceño
Associate Professor
San José State University



Francis Vigil
Tribal Education Specialist
National Indian Education Association



Wayne Thomas & Virginia Collier
Professors Emeritus
George Mason University



Mariana Castro
Director of Academic Language and
Literacy Initiatives – WIDA



Jeff Zwiers
Senior Researcher
Stanford Graduate School of Education



Kathy Escamilla
Professor, Project Director, BUENO
Center for Multicultural Education



Jim Cummins
Professor Emeritus
University of Toronto



Registration
Deadline — Oct. 22nd

La Cosecha 2021 will be a hybrid event, comprising both an in-person and a virtual conference. In-person activities will take place at the Albuquerque Convention Center and partner hotels located in Albuquerque, NM. Registration is NOW open for both Virtual and In-Person attendance.

SUGGESTED FUNDING SOURCES:
Title I * Title IIa * Title III
Migrant Education
Professional Development
Federal School Improvement Funding

2021 FEATURED STRANDS

- DLE Program Development
- Special Education Services
- Pre-K DLE Program Development & Instruction
- Indigenous Language Immersion
- Dual Language Immersion
- Academic Language Development
- Biliteracy, Oracy, and Oral Language Development
- Approaches to English Language Development
- Integrated Technology and Virtual Instruction
- Leadership, Policy, and Advocacy
- Research
- Cultural and Linguistic Responsiveness and Equity
- Family and Community Partnerships

2021 Hotel Partners

La Cosecha Planning Committee has negotiated special rates for you at local hotel properties. These blocks will fill quickly — reserve your room at one of our partner hotels today!



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Preview Phase/Etapa de previa vista Developing Oracy and Key Content Vocabulary

To kick off our unit we used Picture File Cards, a Project Glad® strategy wherein cards with photos related to the topic of the unit are given to students. The students can share their thoughts and observations of the pictures and work together to sort them into categories that make sense to them. Each group of students received about 15 pictures, sticky notes, a pencil, sentence frames, a glue stick, and a large piece of chart paper. The classroom teacher and I explicitly modeled how we wanted our students to interact with each other before we



In small groups, students completed an open sort of animal and plant images and labeled their categories.

released them to work in their groups. We made sure that each group had a lead student facilitator who made sure that each student had a turn, that the sentence frames were being used, and that the group remained on task. While the students worked, the classroom teacher and I floated and listened to the groups' conversations in order to assess and adjust our next moves. We encouraged the use of our students' entire language repertoire as they worked to make sense of their learning. Translanguaging

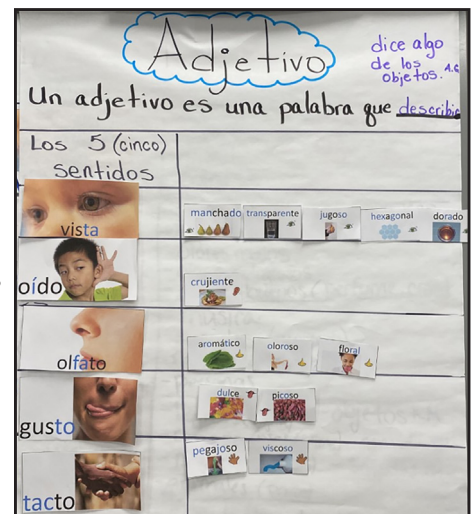
has become a common and successful practice of this kind of group activity in our classrooms and was well used here.

Following the students sorting and labeling, we asked them to share their sorting process, the connections they made between the images, and the process they used to come up with titles for their categories. For this portion we also used sentence frames and had each student in the group share one category. They were encouraged to ask a question about what they would be learning. To prepare for this report out, we asked the students to share their responses with a partner. The partner then

transcribed the thoughts and questions onto the chart paper and added their initials. This provided a way to recognize individual contributions and empower their thinking. It also better prepared the students for the whole-class report out. We were pleasantly surprised to find that the students were making connections to a Kindergarten unit (from two years prior) that aligned vertically with NGSS standards on life cycles. We found that this strategy not only helped our students put the entire unit into context, but also helped guide our instruction. Some of their questions were, *¿Por qué les gusta el polen a las abejas?* *¿Por qué las frutas tienen semillas?*, and more importantly, *¿Para qué se usa el polen?*. We also made sure to put these questions in our *Tabla de consulta* (Inquiry Chart), another GLAD® strategy where we documented their questions. We referred to those questions as the unit progressed and answered them on the chart with the information we learned.

Within this first phase we also had our students review the five senses, learn new and important academic vocabulary, and specific adjectives via TPR. For example, each of the five senses had its own movement. Upon reflection of years past, we decided that a more explicit approach of connecting adjectives would better prepare our students for the language they would need to describe the process of pollination orally, and later, in writing. We also grammatically connected adjectives

in sentences to highlight their role in describing nouns. By creating very interconnected, explicit, and student-generated anchor charts, dictados, bridging moments, word work, and mini-reading and



An explicit approach of connecting adjectives better prepared students for the language needed to describe pollination.

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writing lessons throughout the unit, we found that the students were better prepared to access the academic language we were attempting to teach. Together, these strategies provided reference points as we traversed the unit.

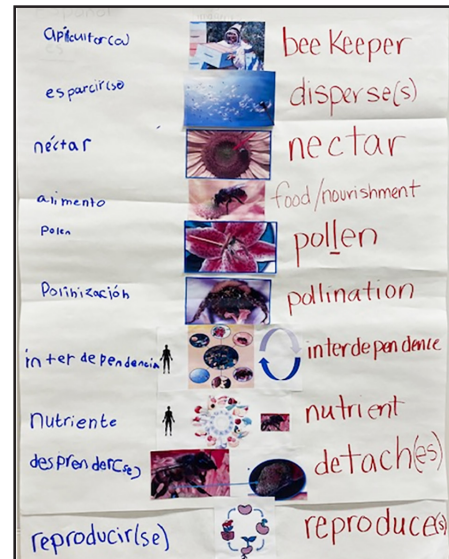
Frontloading

In order to provide opportunities for our students to practice the use of adjectives, the teacher and I set up centers through which the students would rotate. Each center asked the students to use their five senses along with the previously practiced adjectives and sentence frames to describe interconnected items created/used by plants and animals.

| vista | gusto | olfato | tacto | oído |
|--------------|---------|-----------|----------|------------|
| manchado | dulce | aromático | pegajoso | crujiente |
| transparente | píccoso | alarcoso | viscoso | silencioso |
| jugoso | agrio | floral | suave | |
| hexagonal | | | | |
| dorado | | | | |

Learning centers provided students the opportunity for a deeper understanding of the concepts and a chance to practice the language associated with the content.

These items included honey, beeswax, lip balm, cereal, candles, limes, apples, onions, and cotton. We knew this vocabulary would come up in future readings/videos describing how bees help in the creation of these everyday items through pollination. We wanted to make sure that our students would understand the interdependence among the life forms involved and use associated language appropriately. The activity called for the students to see, taste, smell, touch, and listen to each item and describe them using the adjectives shared in class. With all the heavy frontloading, a majority of the students were able to use specific vocabulary to describe and share their findings in our collaborative adjective chart. Throughout this process the students used TPR to learn academic terms, sorted images, identified cognates, and created a bridging T-graph from Spanish to English by conferring with their elbow partner in a turn and talk activity.



Students bridged their learned Spanish vocabulary to English.

Focused Learning Phase/Etapa de aprendizaje enfocado Connecting oral language and literacy

During the Focused Learning Phase of our unit, we used the following strategy—a cross between TPR-Storytelling and Adapted Readers Theater. The teacher preselected a text about the pollination process and identified the main points. As the teacher and students read through the text together, they created gestures for each sentence to help make sense of the text. Later, the students used slides with the text and/or preprinted cards with images and text to correctly sequence the pollination process and to practice the gestures in small groups or partnerships, with rotating student leads. We found that allowing the students to rotate their role as facilitator helped them in their own learning and allowed them to practice helping their peers learn and collaborate. This activity is great for condensing larger pieces of text and for providing the students the opportunity to practice academic vocabulary within the context of the text itself.

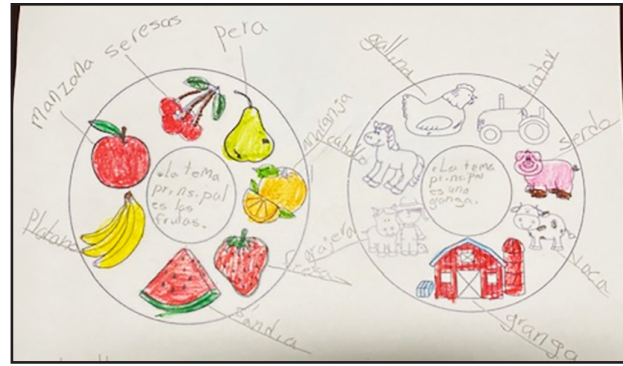
Another skill we wanted to teach our students was to be able to write their own paragraphs with clear main ideas and details by the end of the unit. To start, we once again used TPR in order to provide universal gestures to identify the main idea and details. We used a fist to represent the main idea and our five fingers to represent each detail. To these gestures we attached a graphic organizer of two concentric circles. The inner circle represented

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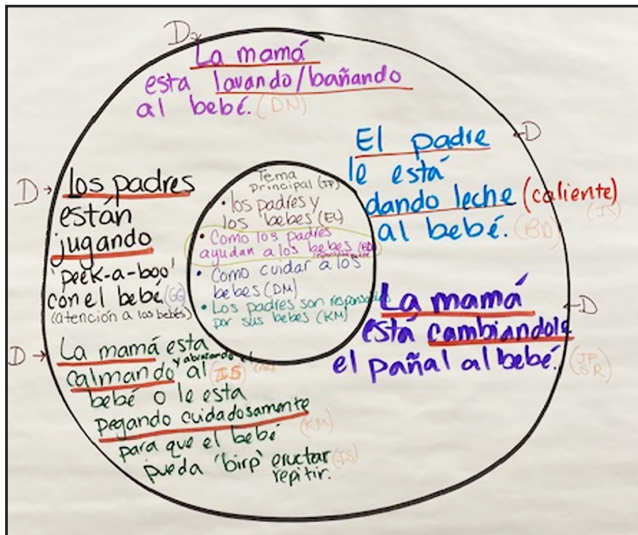


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the main idea/fist while the outer circle had space for the details/fingers. We began these lessons by first having the details appear in the outer circle in the form of images. As the images appeared one at a time, we asked the students to turn and talk and share what they observed in the picture using a sentence frame. We juxtaposed the digital version of the graphic organizer to our chart-paper version where we would write student responses as we went through each image/detail. For the initial introductory lesson we used a variety of pictures that we knew the students



Students applied what they learned about identifying main ideas and details to the topic of interdependence of animals and plants.



Using images of familiar events, students shared observations and decided how they were connected.

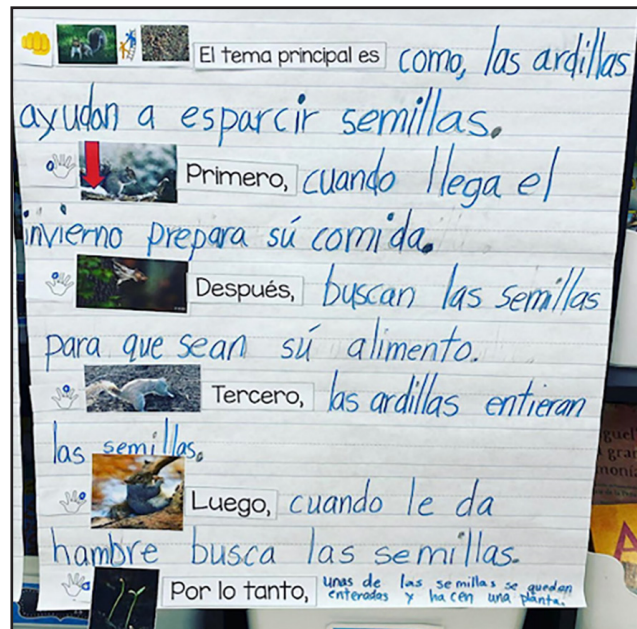
could easily access. We knew that many of our students had siblings they helped take care of. For this reason, we chose images that had to do with caring for a baby. By the time we reached the last detail/image, the students were able to determine how the images were connected to each other. The students shared several versions of the same main idea for these details, which we wrote in the inner circle. Deconstructing and reversing the way we presented the texts in this manner helped the students see paragraphs in a non-intimidating way, thus lowering their affective filter. They became more comfortable approaching larger chunks of text, identifying transition words, finding details, and determining the main idea of each of the paragraphs they encountered.

Application Phase/Etapa de aplicación
Implementing what's been learned independently

After the students practiced guided writing

with the teacher using the main idea and details graphic organizer, they then had an opportunity to create a shared writing piece in small groups using these same methods. We provided a rubric with a checklist which included having the students use images, sentence frames, transition words, main idea and details, adjectives, and academic vocabulary to produce their own writing. Everything we had frontloaded was coming together in these final writing pieces.

Following the shared writing activity, we moved to partnered or individual writing projects. The students now had to develop their own text on a different animal that helped pollinate plants or disperse seeds. We co-constructed a rubric of what should be included in their writing.



The frontloaded skills, language, and conceptual learning came together in a final writing piece.

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For example, the students decided to create their own TPR movements to accompany their writing and performed these as they read their report to the class.

Not only did the students get to read and write about an animal that pollinates or disperses seeds, but they also had the opportunity to create their own robotic pollinator of that animal. The specific grade level NGSS expected the students to develop a simple model that mimicked the function of an animal in dispersing seeds or pollinating plants. Some of the animals chosen were a squirrel, bat, hummingbird, bear, ladybug, butterfly, cow, and of course, a bee. We made sure to provide differentiated texts on these animals representing different reading levels. Again, we co-created a rubric for the robotic pollinator.

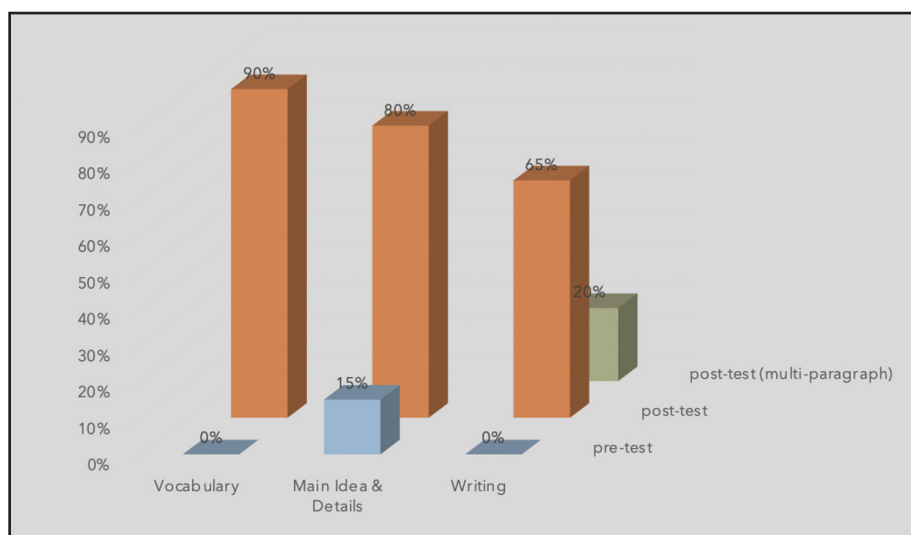
The students had to first sketch their animal on to a cup, adding the necessary setting elements described for the animal to pollinate or disperse seeds, and then “go shopping” among classroom art materials for the different parts of the animal that they needed to add to their pollinator. We provided the students with step-by-step instructions on closed circuits to help them put together a working motor and wheel attachments to their plastic-cup prototype. We allowed the students to tinker on their own. It was a little nerve wracking holding back and not jumping in to help the students, but exciting to see what they came up with on their own. After the students created their pollinator prototypes, they decorated them appropriately.

One group of students that completed their pollinator project ahead of schedule had the opportunity to interview their parents and/or grandparents regarding important *plantitas* that they grew or used at home or in their home country in their everyday cooking or as *remedios* for specific ailments. The students used an interviewing protocol to gather information and shared their findings with the class. Some

of the highlights of these conversations resulted in information on plants such as *manzanilla* and *gordolobo* and their use in curing ailments. They also heard that it’s better to use these *remedios* instead of westernized medicine and how to continue to grow and use these traditional herbs in the future. Most importantly, the students were able to connect their understanding of seed dispersal to family-used plants.

The results/Los resultados Reflection & Improvement

The post-tests we administered at the end of the unit showed that 90% of the students’ academic vocabulary increased. 65% of the students improved in their ability to identify main idea and details, and 85% of the students were able to write a one-to-two paragraph essay on the process of pollination.



Assessments conducted at the end of the unit showed improvements in students’ vocabulary, identification of main ideas and details, and writing.

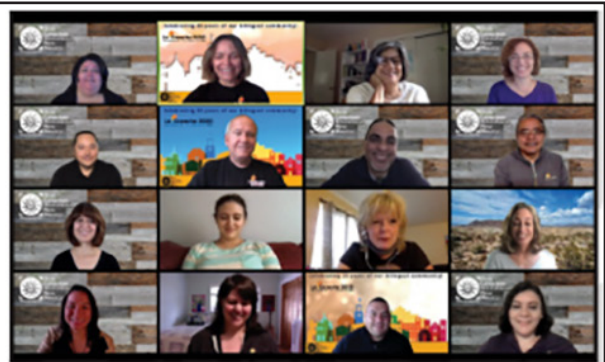
We learned that by choosing specific research-based strategies designed with our students’ learning and ways of knowing in mind, we provide comprehensible input that will help them attain further knowledge. Our students are bright and want to share what they know and are learning. We made sure that we provided the necessary tools and scaffolds for them to grow as dual language learners.

A summary of the common themes discussed during the networking sessions is presented in the table below.

| Keep | Toss | Tweak |
|---|---|---|
| <p>Student and Educator Growth Mindset</p> <ul style="list-style-type: none"> ● Perseverance, Resiliency, Flexibility, Teacher Efficacy, Innovation <p>Focus on Relationships</p> <ul style="list-style-type: none"> ● Students - Social-Emotional Learning ● Families - Authentic involvement and support ● Colleagues - Authentic collaboration and interdependence ● Community - Authentic partnerships <p>Authentic Assessment - Student presentations, small-group reading, focus on language levels</p> <p>Small Class Sizes</p> | <p>Pandemic Restrictions</p> <ul style="list-style-type: none"> ● Remote Learning ● Hybrid Learning - remote learning with concurrent in-person ● Masks ● Social Distancing ● Fear of getting sick ● Trauma experiences <p>Equity Issues</p> <ul style="list-style-type: none"> ● Language Equity - Focus on English online resources, compromising partner language (e.g., Spanish, Navajo) instructional time in dual language programs, lack of partner- language resources ● Digital Divide - connectivity issues, access to high-quality devices ● Support services scheduling conflicts (e.g., special education, EL) <p>Relationship Barriers</p> <ul style="list-style-type: none"> ● Assignments being surrogate for direct communication ● Isolation ● No proximity to students <p>Student-Engagement Barriers</p> <ul style="list-style-type: none"> ● Attendance problems ● Limited physical movement ● Limited peer-to-peer to interaction ● Distractions - at home, at day care, older siblings taking care of younger siblings ● Lack of participation due to heightened self-consciousness (especially for ELs) ● Failed technology applications (e.g., Google Workplace doesn't recognize the Navajo language) | <p>Which technology tools to keep for in-person learning?</p> <ul style="list-style-type: none"> ● Tools that provide equitable interactive student response systems (e.g., Kahoot, Pear Deck™, Nearpod, shared Google Slides). ● Tools that facilitate parent involvement and communication (e.g., ClassDojo, SeeSaw, Google Classroom). ● Tools that engage learners (e.g., Jamboard, Padlet, game-based apps, social media, Project GLAD® online strategies) ● Tools that students can use to display their understanding and further develop their language and literacy skills (e.g., Flipgrid, Blabberize, Prezi, IMovie) |

Thank you for joining us for this year's Summer Institute! We appreciate all you do for our culturally and linguistically diverse students in this ever-changing world! ¡Bien hecho!

Diana, Michael, Emilis, Kathleen, Patrick, Leslie, Natalie, Lisa, Ruth, Evelyn, Azul, Yanira, and David
2021 DLeNM Summer Institute Team



Inequality Matching

The primary reason for this activity is to activate prior knowledge and help students remember how to graph an inequality without having to tell them or show them. Through conversations with their partners, students are able to notice the details required for graphing inequalities such as open dot, closed dot, and which way the arrow should point. After students have had a chance to match some of the inequalities, I pause the class and ask students to share a pair of cards they are very confident in being correctly matched with the class. Student volunteers then show their match and explain why they think they are correct. The rest of the class analyzes the explanation and asks questions, which helps clarify their own thinking. I also ask for student volunteers to share a pair that they are unsure of which inequality and graph match. I purposefully include cards that are $x > 5$ and $x \geq 5$ for students to match, so that the conversation of the type of dot (open or closed) to be used when graphing is discussed. I then allow students time to finish the matching activity. In order to help students synthesize their prior knowledge, the students and I create an anchor chart explaining how to graph inequalities. This anchor chart stays up on the wall of my classroom and is used as a reference throughout the unit.

Another sorting activity I use to kick off my integer operations unit (7th Grade) asks students to sort situations that include positive and negative numbers. This activity helps students recall vocabulary associated with integers. Students usually work in a small group to read and talk about whether the situation is positive or negative. Some of the situations include vocabulary such as opposite, profit, withdrawal, above/below sea level, loss, gain, deposit, etc. Students usually have great success with most of the situations, but there are a few that throw them each time. For example, “withdrawal of \$40 from an ATM machine” sparks an interesting discussion. Students argue about whether it is a positive or negative situation. The student who is thinking of it as a negative situation is thinking about the bank account from which the money is drawn, while the student who is thinking of it as a positive is thinking about the money in his pocket. This leads to a discussion about how words are used generally in the real world and how their meaning may change or be enhanced in their study of mathematics. Through this activity, students are able to make connections to the world around them as well as interact with the vocabulary associated with integers.

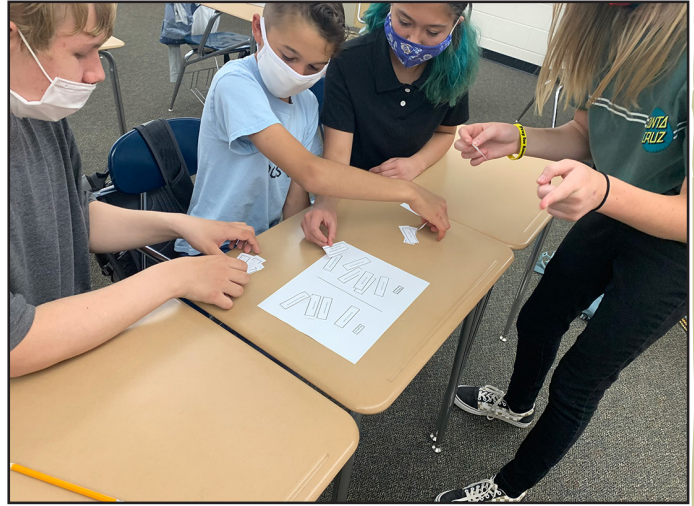
| Positive | | Negative | |
|--|---|-------------------------|---------------------------|
| Withdrawal of \$40 from an ATM machine | The stock market went up 243 points today | The opposite of 33 | 3 inches taller |
| Loss of \$14 | The opposite of -20 | Gain of 6 yards | 45°F below zero |
| Deposit \$34 | 264 feet above sea level | Gain 9 pounds | Profit of \$21.34 dollars |
| 22 degrees below zero | Go 4 floors down | 43 feet below sea level | Take 9 steps forward |
| You owe \$6 | A loss of \$16 | 10 degrees above zero | Lose 29 pounds |
| 8 steps backward | | Gain of 5 points | |

Cards used in the sorting activity include positive and negative situations.



—continued from page 14—

I have found multiple benefits to using focus and motivation activities in my classroom, but the transformation I have seen in my students has been amazing. Students have more confidence when sharing and talking about mathematics. This is due in part to them being more likely to engage with mathematics after I have provided them the chance to recall and discuss previous information they have learned in a non-threatening way. They use mathematics vocabulary with ease and are able to explain the connections they have made. Although sorting and matching activities are a couple of my favorites, I continue to work on a variety of positive ways to include other focus and motivation activities in my classroom.



The real-world situations listed on the cards spark interesting conversations among students.

What is AIM4S^{3™}?

Achievement Inspired Mathematics for Scaffolding Student Success (AIM4S^{3™}) is a framework that shelters mathematics content to make it comprehensible and accessible to all students, with a specific focus on language learners (ELLs/ SLLs) and students who struggle with math. Equity and accessibility are the driving forces behind why this framework was developed.

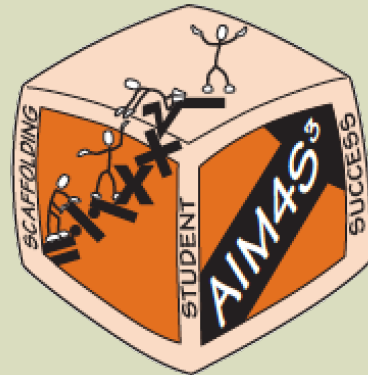
The AIM4S^{3™} professional learning is grounded in research-based best practices and includes classroom demonstrations, theory, coaching, and feedback. Participants experience the framework in action with students, then implement strategies, and bring back artifacts to share with the group. Using assessment to drive decision making is addressed throughout the training as participants implement, assess, reflect, and adjust.

AIM4S^{3™} is a framework, not a curriculum. The training focuses on high-quality instruction driven by standards. It can be used with any materials or math program and is applicable for kinder through middle school math teachers and instructional leaders. It is also a strong match for high school teachers working with newcomer students or open to teaching in non-traditional ways.

The Level I training is typically a six-day training with three two-day sessions spread over three to four months to support participants in implementing the strategies with students. It is offered virtually and in person. There also is a synchronous/ asynchronous training available that is completed over a three-month time span.



To learn more about the AIM4S^{3™} math framework, go to <http://aim4scubed.dlenm.org> or email aim4s3@dlenm.org.





Dual Language
Education of
New Mexico

PO Box 91508
Albuquerque, NM 87199
www.dlenm.org
505.243.0648

Executive Director:
David Rogers
Director of Business and
Development:
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Editor: Ruth Kriteman
soleado@dlenm.org

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**18TH ANNUAL NATIONAL
SUMMIT:** October 7-9, 2021,
in Washington, DC. For more
information, please visit
www.alasedu.org.

▣ WIDA 2021
ECONFERENCE—**REIMAGINING
OPPORTUNITIES AND
ACCESS FOR MULTILINGUAL
LEARNERS:** October 14, 2021.
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www.wida.wisc.us.

▣ TEXAS ASSOCIATION FOR
BILINGUAL EDUCATION (TABE)
HYBRID CONFERENCE 2021—
**ROMPIENDO BARRERAS:
REACHING NEW HEIGHTS
TOGETHER:** Online—October
23 + 30, 2021,

In Person—October 25-26,
2021, in El Paso, TX. For more
information, please visit
www.tabe.org.

▣ DUAL LANGUAGE EDUCATION OF
NEW MEXICO'S ANNUAL LA COSECHA
DUAL LANGUAGE CONFERENCE—
**COMUNIDADES SIN FRONTERAS:
BUILDING ON OUR LINGUISTIC AND
CULTURAL CAPITAL TO ENSURE
EQUITY:** November 10-13, 2021, in
Albuquerque, NM. This will be a hybrid
event, comprising both a virtual and in-
person conference. The website is live
for La Cosecha 2021 registration and the
most up-to-date information. Visit
www.lacosechaconference.org and make
your conference plans now!

▣ KERES CHILDREN'S LEARNING
CENTER (KCLC), 5TH ANNUAL
NATIVE LANGUAGE SYMPOSIUM—
**CROSS-GENERATIONAL MODEL
OF EDUCATION: ANTI-BIASED,
ANTI-RACIST EDUCATION FOR
INDIGENOUS CHILDREN:** November
10-11, 2021, in Albuquerque, NM.
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visit <https://www.kclcmontessori.org>.

▣ AMERICAN COUNCIL ON THE
TEACHING OF FOREIGN LANGUAGES
(ACTFL)—**ACTFL 2021 VIRTUAL:**
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<https://www.actfl.org/convention-and-expo>
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