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Use of Non-Linguistic Representation in a 1st Grade Classroom

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Use of Non-Linguistic Representation in First Grade

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Abstract

Clinical practice, in the field of education, is the “internship” or “apprenticeship” that other fields of study incorporate. Like many other majors, this is the most influential time to put our learned skills to the test in the most genuine environment possible: a classroom for entire semester. For my clinical practice, I was placed in a on the English side of a dual-language 1st grade classroom at an elementary school in the OPS School District. For this project, I have elected to teach a five-day reading unit from Houghton Mifflin Harcourt’s (HMH) curriculum. I taught the five-day unit, collecting and analyzing data on students’ progress. This five-day unit on falls on the second week of module six.

Previous to this module, I also taught module six week one as. In the HMH curriculum, they combine reading with phonics (foundational skills). Though I taught this teach portion as well, I wanted to solely focus on supplementing and accommodating the reading tasks of this week as this is the part of our day we spend the most time investing in. Hence, the lessons, materials, and data center around reading focused skills.

The problem that I am intervening on through teaching this unit is the progress that students are not making for various reading skills. The skills for this unit that students are focusing on are Perspectives/Point-of-View, Text-to-Self/Text-to-Text Connections, and Opinion and Reasoning. For many of these students, showing their learning is difficult when it comes to writing as they are majority English Language Learners or English as a Second Language students. Because of this, I implemented multiple forms of non-linguistic representations for students to use to display their learning throughout the entire unit.

Background

This school is a very large school with averages around 700 students per school year. About 90% of the school population is of Hispanic background. With this dynamic comes the struggles of language barriers between families and school administration/staff as well as the struggle of students being English Language Learners or English as a Second Language. Gomez Heritage has a dual-language program across all grade levels that allows for some students to learn all subjects in Spanish as well as English. These students alternate between two teachers, one Spanish and one English, and teachers rotate the subjects that they teach to ensure students are learning equally in Spanish and English.

With only being able to speak English, I was placed in English homeroom of one of the two dual-language classrooms in 1st grade. My cooperating teacher has 15 years of teaching experience; nine of which she spent teaching Kindergarten, three in second grade, and this is her third year teaching 1st grade. The Spanish teacher who works alongside and shares students with us is Valerie Rangel. This is her first year teaching but has ten years of paraprofessional experience.

Participants

With Gomez Heritage being a dual-language school, it attracts many families who have recently immigrate to the area as their students are given the option to learn in Spanish for half of the day. In fact, in Mrs. Holmes's group there are only three students who are not English as a Second Language (ESL). On top of this there are two students with Individualized Education Plans for speech. The total number of students is twenty six, thirteen boys and thirteen girls.

Introduction

Language is a huge factor in the academic success of the majority of students, mainly in reading/writing. It is for this reason that I decided that I wanted to take on the challenge of teaching the week two of module six. Abstract ideas, like opinion and reason, point of view, and connecting texts to themselves or other texts can prove to be extremely difficult. The most effective way for students to understand these concepts is to make them concrete. A practical method to accomplish this is to make learning more hands-on or interactive. Students were asked to reflect on their learning each time we introduced the new concept by quick sketching, writing, or discussing their ideas and thoughts. This learning took place over the course of five lessons with these objectives:

- Lesson 1: Students will be able to identify and implement the idea that there are different points of view in books, from characters or from a narrator
- Lesson 2: Students will be able to evaluate details in a story and identify what details are most important
- Lesson 3: Students will be able to determine the author's opinion and supporting details in opinion writing
- Lesson 4: Students will be able to connect a text to their own experiences and other texts
- Lesson 5: Students will be able to explore and discuss how and why authors organize their texts

These lesson objectives address these three Nebraska State Standards:

- **LA.1.RP.3** Explain the difference between the roles of author and narrator or speaker in a literary text.
- **LA.1.RP.7** Make connections between own experiences and other cultures in literary texts.
- **LA.1.RP.8** With prompting and support, read and comprehend a wide range of literary texts of appropriate complexity for Grade 1

Methods and Materials

Methodology

In order for students to be successful in reaching the lesson objectives, I conducted research on various Instructional Strategies to implement while teaching. These included Modeling, Cooperative Learning, and Non-linguistic Representation. I also conducted research the importance of multiple means of assessment. The various forms of assessment I used were a Pre-Test, Formative Assessments in the form of quick writes and quick sketches, and a Post Assessment.

Materials

In first grade, it is important to not overwhelm students with excessive materials. Too many items or too many tasks leads to chaos and confusion, so it was important to be intentional with all materials I gave students. The main materials I used include Curriculum Graphic Organizers (Text-to-Self, Point of View/Perspectives, Opinion and Reason), Curriculum provided PowerPoint (Foundational Skills), Graphic Organizer (Three-square story board, blank squares of paper to document learning), and Point of View/Perspective video.

Technology

For abstract ideas like the ones we worked with, we used an extra video not provided in the curriculum to give a more concrete understanding of Point of View. Not for just this video but for displaying the main topics, we used the the iPad and the TV, as well as the DocCamera for assisting in modeling.

Results and Data Analysis

Throughout this unit, there were many conclusions about students that were made as we collected data and observed students. First, let's breakdown the assessments and what they entailed.

Pre-Test

There were three questions for this Pre-Test that were true or false. Students were asked to circle the correct answer as they were read aloud. For students, the question that was the most difficult (question 2) was about over point of view. Question #2 stated "A story can be told only by narrator, never by the characters in the story." Students were most unsure of this question as only 50% of the students answered it correctly, but question #2 but followed closely by question #1 with 53% of students answering it correctly. Question #3 was the question that students answered correctly the most. This question asked students to choose whether it was true or false that "connecting a story to our own experiences or to other books helps us to better understand what a story is talking about" where students chose the correct answer "true" (See Appendix A).

Formative Assessment

The images provided (Appendix B) are a portion of the students' work for each area focused on during this unit. Every time we read a new story, we highlighted a new skills: opinion and reason, point of view, and connecting text to self/texts. They were then asked to apply this skill. I selected artifacts from students who are both high/on grade level as well as from those who are below grade level in reading to show the difference in understanding. Through the analysis of this data, I could see student growth in engagement and participation. Using drawing before asking them to write resulted in most of them attempting to display their writing. Students were supported as well through sentence frames that motivated them complete the activity. When

collecting these graphic organizers, I was able to see that these different uses of non-linguistic representation were helping students to grasp the different skills and ideas.

End of Unit Assessment

Students take a district-wide assessment at the end of this unit, and it covers skills not only from the reading portion but also for foundational skills. This test is ten questions and multiple choice. The final five questions were foundational skills focused, but I included them in the data as this is the entirety of the assessment. The reading focused questions that had the most correct answers were question #5 and question #3. These two questions focused on the author's purpose/the opinion in the story and the way the author organized the text. Question #4 was the questioned answered incorrectly the most throughout the whole test with only 18% of students answering it correctly (See Appendix C).

Analysis

The data confirmed what I had already observed about the students who are usually struggling with reading concepts and phonics: students need more concrete examples in order to understand how to apply the skill. Throughout this unit, I created formative assessments that included drawing their knowledge in order to make things more concrete as well as provided many visuals and modeled everything. I also pulled these students for small groups to review certain areas of growth, like vowel sounds or ending sounds.

In teaching this unit, the three instructional strategies I used were Modeling, Non-linguistic Representation, and Cooperative Learning. I saw evidence of both modeling and non-linguistic representation positively impacting students through my summative assessment data. Students, who are usually disengaged from activities or discussion, were providing quality work that displayed their understanding of the concept.

Discussion & Conclusion

Non-Linguistic Representation

One major form of non-linguistic representation that is beneficial to students, especially those who are not proficient in writing or fluency, is sketching or drawing. In the article *The Implications of the Non-Linguistic Modes of Meaning for Language Learners in Science: A Review* by Williams and Tang (19XX) focused on the implication that using multiple means of communicating learning do for students in the science aspect. But using those same strategies in other areas can provide similar results. This study also focused on how this can benefit students who are language learners. It was discovered that non-linguistic modes like action, image, gesture, and sound benefit these kinds of students because traditional means of communicating, speaking and writing, require more structure, like grammar and organization. For language learners, this can be more anxiety inducing and stressful.

Similarly, graphic organizers can be of assistance to English Language Learners (ELL) or ESL students when being asked to display their understanding. The journal, *Let's Get Graphic: The Integration of Visual Representation to Demonstrate Learning* (Kelly, 2020) focuses on the use and implementation of graphic organizers to solidify learning. An example that can be used for student is a kind of visual representation. This can look like graphic organizers, building models, generating mental images, drawing or doing any sort of physical activity. Incorporating these higher order thinking skills results in deeper learning and long-lasting knowledge.

Modeling

In the journal, *Making the Batter Better: Using the Fluency Development Lesson as a*

Recipe for Success, Kulich (2009) emphasized the use of read alouds and choral reading to supplement literacy. The article mentions that in modeling fluent reading in your classroom through read alouds, you begin to cause students to develop their own personal desire to read. It also provides an example for student to model their own reading on and as a goal for what their reading skills can turn into. As for choral reads, the article says that this helps students who are less fluent as they can depend on those who are more fluent to help them through the text. It helps to create automaticity for those students who are less fluent while providing continued practice for those who are more fluent.

Similarly, in Schutz and Rainey's article, *Making Sense of Modeling in Elementary Literacy Instruction* (2020), the research helped to support the importance of modeling thought process and understanding to help develop students' literacy. Modeling is described in the article as "the instructional practice in which teacher represent the invisible work involved in reading, writing, and reasoning with texts." It was stated that it is both demonstrating how to do something as well as thinking aloud through a process to improvement student engagement and understanding. It's also a major component of the gradual release framework. On top of this, they described three different ways in which teachers were observed modeling: showing, situating, abstracting. Through incorporating these three ways of modeling, student growth was observed as it involves teachers planning and modeling for the specific needs of the students.

Cooperative Learning

In reading two different journals, *Developing Cooperative Learning in a Content and Language Integrated Learning Context to Enhance Elementary School Students' Digital Storytelling Performance, English Speaking Proficiency, and Financial Knowledge* by Fan & Chan (2023), and *The Influence of Small Groups on Leader Stability and Task Engagement in*

the Language Classroom by Leeming (2024), there was much research and data on the influence of small groups, but more importantly, the influence of them on students in language classrooms. Additionally, in the study conducted by Fan & Chan, there was a control group and experimental group to discover if incorporating the cooperative learning model would improve English speaking proficiency and creation of videos to story tell. At the end of the experiment, it was shown that the experimental group outperformed the control group when it came to creating videos to story tell and their proficiency in speaking English. From this, it was encouraged that an implication of this for others is to incorporate cooperative learning in creating videos to story tell to help students improve their organization and communication skills.

Multiple Means of Assessment

Just as it is important for students to have various forms of expressing their learning, it is important for students to be given various ways for students to display their understanding and learning. Some ways that I included these were through daily Formative Assessment, as well as a Pre-Test and End of Unit Assessment

Pre-Assessment

In Berg's article *Guiding Classroom Instruction Through Performance Assessment* (2010), there are many different benefits listed for using pre assessment in elementary classrooms. For teachers, being informed about their students' knowledge base is important as it can lead to better informed decisions. When the data is present prior to the beginning of a unit or module, it gives a better understanding of how to use your time teaching. Whether it is taking more time to teach a certain skill or pulling smaller groups of students to more intentionally teach them, pre assessment provides the data to plan that all of that out.

Formative Assessment

Formative assessments take so many forms but exit tickets/closure activities and small groups are the two I chose to research and incorporate. The article, *Draw a Picture of Something You Learned:” A Critical Multimodal Analysis of Multilingual Students’ Classroom Drawings* influenced my choice and decision to adapt my graphic organizers to incorporate this idea. In this article, the whole idea is that multiple perspectives for literacy development are needed. Using visual-based opportunities for tracking learning, like exit tickets, add to students, especially English learners, experience and deeper understanding. When providing students various modes of expression, it gives students opportunities to make learning more personal (Cappello & Barton, 2022).

As for small groups, the article *Assessing and Predicting Small-Group Literacy Instruction in Early Childhood Classrooms* discusses though they has their controversies, there is evidence of why they are important. Mostly, they’re extremely responsive to students’ needs. Its been discovered that students children learn best when working together with someone who is “more knowledgeable.” Small group instruction is an ideal format for this to occur and for students to receive differentiated instruction (Farley et al., 2017).

Post-Assessment

Post assessments, or summative assessments, are the most common form of assessment throughout time, but the way they are conducted has changed greatly over the years. In Kibble’s article, *Best Practices in Summative Assessment*, it is discussed that the use of assessments has always been important and used in many formats. The effectiveness of them has always been a struggle, so this article helps to give information of what effective assessments entail. According to this article, there are a few components necessary. To ensure an effective summative assessment: reliability, validity, feasibility, cost effectiveness, acceptance, and educational

impact. The use of backward planning, defining learning outcomes and then determining the types of assessments suitable, is a great practice to implement and adapt. On top of this, ensuring that there are enough quality questions to collect accurate data and providing students with clear instruction and practice is a must for all summative assessments.

This post assessment helped to show that students were able to grow in the area of opinion and reasoning more than any of the other reading skills. One of the two questions that students were struggling with the most on the Pre-Test was on opinion and reasoning. On the post assessment, question #5 asked about the author's purpose/opinion to which 68% of the students were able to answer it correctly. This proved that the use of non-linguistic representation for this reading skill helped students to comprehend and implement what they had experienced and learned during the unit.

I think that the main thing I would do differently is schedule in review time for each skill area the day after introducing to allow for students to explore the concept more rather than jumping into to next skill. With the dual-language classroom setting, it is very difficult to do this as it is imperative that both the English and Spanish teacher keep up with the district provided pacing guide to ensure that students are receiving the correct learning in for Spanish and English.

I believe that overall, my use of modeling and practicing the skill each time it was introduced gave the students a more concrete way to conceptualize the learning. Reading skills are difficult because they are often not concrete, so my efforts to provide graphic organizers and visual representation as well as modeling everything had a more positive impact on my students' retention of the material.

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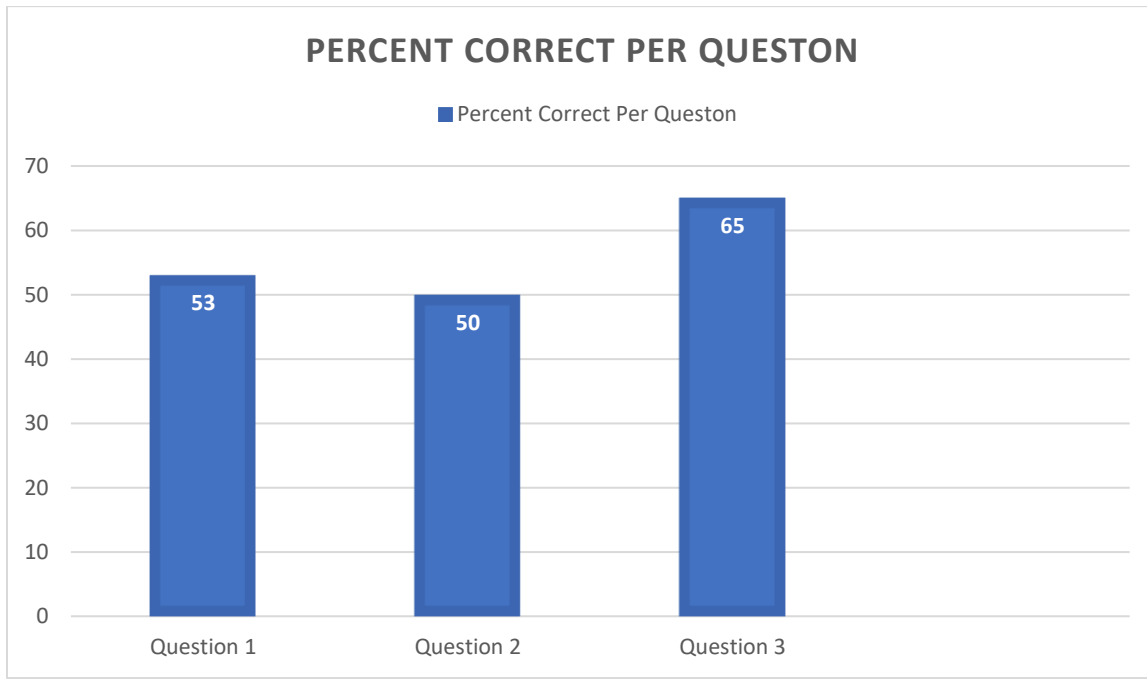
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Appendix A

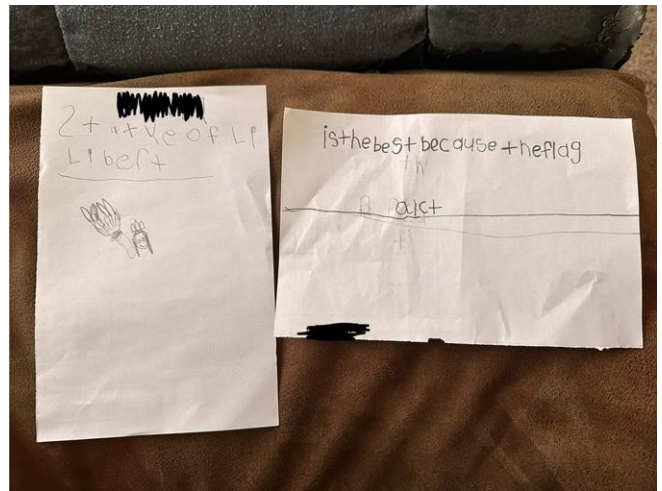
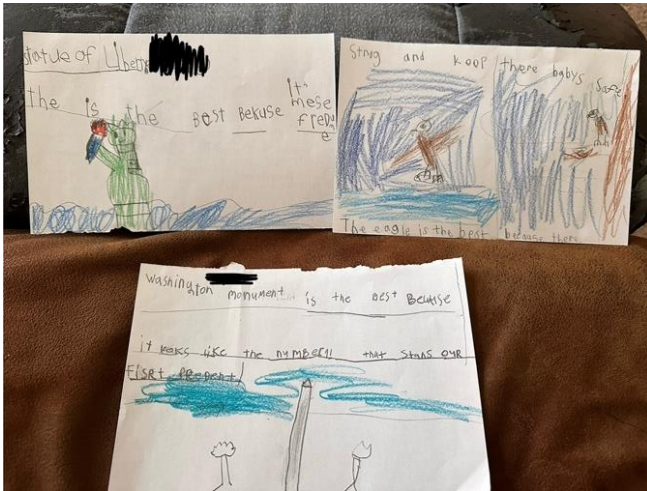
Students	#1	#2	#3
#1 (1/3)	Red	Red	Green
#2 (0/3)	Red	Red	Red
#3 (1/3)	Red	Red	Green
#4 (1/3)	Red	Green	Red
#5 (1/3)	Red	Red	Green
#6 (2/3)	Green	Red	Green
#7 (1/3)	Red	Red	Green
#8 (3/3)	Green	Green	Green
#9 (3/3)	Green	Green	Green
#10 (1/3)	Green	Red	Red
#11 (1/3)	Red	Red	Green
#12 (1/3)	Green	Red	Red
#13 (1/3)	Red	Red	Green

Students	#1	#2	#3
#14 (2/3)	Red	Green	Green
#15 (1/3)	Green	Red	Red
#16 (2/3)	Red	Green	Green
#17 (3/3)	Green	Green	Green
#18 (3/3)	Green	Green	Green
#19 (0/3)	Red	Red	Red
#20 (3/3)	Green	Green	Green
#21 (2/3)	Green	Green	Red
#22 (3/3)	Green	Green	Green
#23 (3/3)	Green	Green	Green
#24 (3/3)	Green	Green	Green
#25 (0/3)	Red	Red	Red
#26 (2/3)	Green	Green	Red

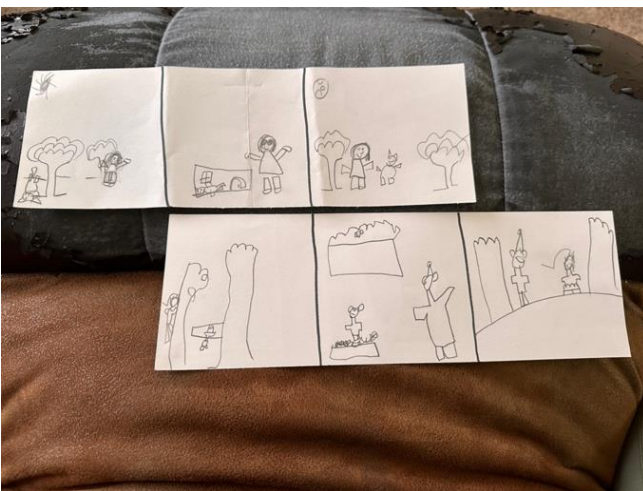


Appendix B

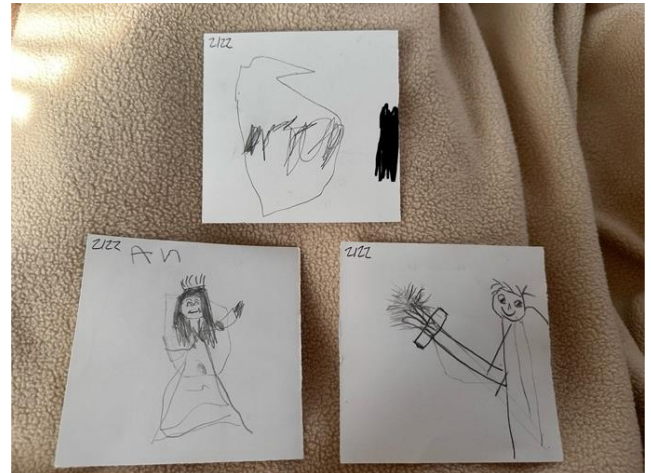
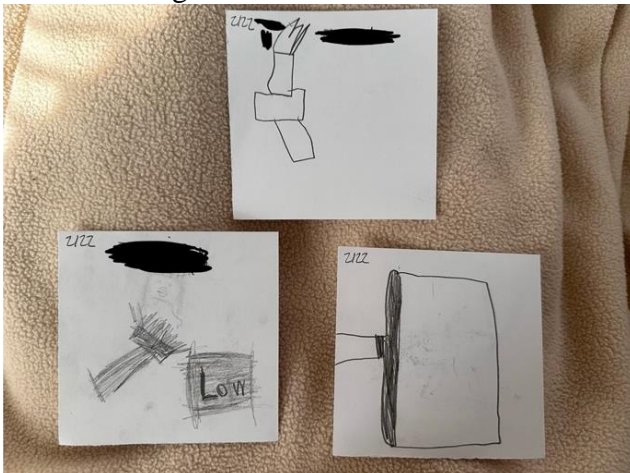
Opinion and Reason:



Point of View:



Connecting Text to Self/Text:



Appendix C

Students	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
#1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#2 (2/10)										
#3 (6/10)										
#4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#5 (9/10)										
#6 (7/10)										
#7 (4/10)										
#8 (8/10)										
#9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#10 (7/10)										
#11 (6/10)										
#12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#13 (7/10)										
#14 (8/10)										
#15 (7/10)										
#16 (7/10)										
#17 (8/10)										
#18 (7/10)										
#19 (7/10)										
#20 (5/10)										
#21 (0/10)										
#22 (4/10)										
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#25 (1/10)										
#26 (8/10)										

