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JOURNAL OF LANGUAGE & LITERACY EDUCATION

A Case Study of Struggle and Success: Profiling a Third Grader's Reading and Writing in a Multimodal Curriculum

Angela M. Wiseman, Melissa Pendleton, Christine Christiansen, & Nicole Nesheim

Abstract: This article reports findings on a case study of Ellie as she participates in a language arts curriculum that incorporates multimodal literacy practices—including photography, drama, and art—to teach reading and writing. Our study was informed by the theoretical framework of multimodal social semiotics, which provides insight into how mediational tools allow for greater complexity of thought while engagement within the modes expands the potentials for learning. Multimodal interaction analysis (Norris, 2004) was applied to video data from this study. Findings reveal the significance of using photographs for Ellie's meaning making in the third grade classroom. In addition, we were able to observe how Ellie's responses at times conflicted with the intentions or expectations of the classroom. This study reveals the significance of multimodal video data analysis as a way of understanding the complexity of literacy practices in the classroom.

Keywords: visual literacy, photography, multimodality, language arts, multimodal social semiotics



Angela Wiseman, Ph.D., is an Associate Professor of Literacy Education at North Carolina State University. Angela's research focus includes two topics: 1. Responding to children's literature and 2. Visual and multimodal research methodologies. Her current research project focuses on formerly incarcerated parents as they respond to children's literature in book discussion groups. Angela teaches doctoral courses on literacy theories and qualitative research as well as language arts methods courses. She is the co-editor of the *Journal of Children's Literature*.



Melissa Pendleton, Ph.D., NBCT, is an Assistant Professor of Literacy at Western Kentucky University. Melissa's research interests include classroom discourse and disciplinary literacy. Currently, she is investigating teacher candidates' digital stories in a clinical teacher preparation program. Melissa teaches undergraduate literacy methods courses and graduate courses in research methods and advanced literacy concepts.



Christine Christianson, Ph.D., is an Assistant Professor of Teacher Education at Ferrum College. Christine’s research interests include expressive writing, trauma studies, and teacher education. Her current research examines how teacher education programs prepare diverse populations to pass the minimal competency testing required by states for teacher licensure. Christine teaches introduction to teacher education; content area literacy; and curriculum, instruction, and assessment methods courses.



Nicole Nesheim, Ph.D., is an Assistant Principal at Saint Raphael Catholic School Diocese of Raleigh. Nicole’s research interests include teacher preparation, apprenticeship models, teacher-leadership, and dialogic learning. Her research currently focuses on alternate spaces for professional development and how asynchronous dialogue can enhance these experiences.

This article reports findings on a case study of Ellie, a third grade student, as she participates in a language arts curriculum that incorporates multimodal literacy practices, including photography, drama, and art to teach reading and writing.¹ Our interest in researching a multimodal language arts curriculum is to consider how students use expanded modes of learning in the classroom. Incorporating multimodal instruction has the potential to provide more opportunities for students to build and share knowledge, particularly if they struggle with print-based literacies. As literacy researchers, we believe it is important to consider how multimodal instruction could allow for new ways that students engage in the language arts curriculum. Ellie stood out as an illustrative case because she was especially reflective of how her photographs helped her writing, yet she was identified by her teacher as “struggling.” As we analyzed her literacy learning in the classroom, we found that her participation in reading and writing practices was complex and that visual strategies supported her literacy learning. Our primary question is this: How does the integration of multimodal instruction affect how a third grade

reader and writer responds and learns in the language arts classroom?

Theoretical Framework

The analysis of Ellie’s participation in a multimodal language arts curriculum rests on her connections and responses within the classroom context. In this section, we will explain how the theoretical framework of multimodal social semiotics informed our understanding of this case study.

Multimodal Social Semiotics

Ellie’s language arts curriculum featured multimodal projects with a specific focus on photography as a means to communicate and learn. In multimodal social semiotics, social actors rely upon available modes to create meaning; the potential meaning created is directly influenced by the availability of resources and their related affordances and constraints (Halliday, 1977). A multimodal curriculum refers to the idea that many modes, or systems of expressing meaning, are used to build knowledge (Kress & van Leeuwen, 2006; Serafini, 2012). Multimodal social semiotics also describes learning as a process that occurs collaboratively with

to refer to individuals who identify as female, and “ze” for individuals who identify as gender-neutral. I have selected these pronouns because I believe they are more familiar for a diverse audience of readers.

¹ I acknowledge that there is a gender spectrum and that myriad pronouns exist that I can use when referring to individuals in my writing. Throughout this article I will use “he” to refer to individuals who identify as male, “she”

others and is affected by social contexts (Halliday, 1977; Lenters, 2016).

While all texts can be considered multimodal (e.g., a child's written story might reflect ideas from her imaginary pretend play she did at recess or a television show she watched at home), a multimodal pedagogical approach that intentionally integrates a variety of communicative modes expands options that students have for both learning and expressing. Using a range of mediational tools allows for greater complexity of thought while engagement within the modes expands the potentials for learning. Research has documented how emergent readers and writers have learned and even situated themselves as experts through tools (e.g., maps, visuals) made available with semiotic resources (Kissel, Hansen, Tower, & Lawrence, 2011). For example, Cappello and Lafferty (2015) found in their research on integrating photography in an elementary classroom to promote disciplinary literacy that students' responses demonstrated an "alternative language" that reflected complex understandings across subject areas. Specifically, the teacher and researchers observed how students' metacognition, risk-taking, and reflective thinking were important aspects of how they responded to the multimodal curriculum.

Encouraging multimodal responses (e.g., products combining visual and linguistic modes) is one way educators have developed pedagogy that encourages more expansive approaches for learning, thus creating more inclusive classroom contexts (Cappello & Hollingsworth, 2008; Siegel, 2006). In addition, incorporating multimodal approaches to learning may be more engaging for students because it often builds on their out-of-school literacy practices (Kyser, 2015). Opportunities to mediate understanding using what could be considered traditional production (e.g., linguistic communication) alongside the incorporation of multimodal elements (e.g., photographs, textiles)

has the potential to support students' literacy skills (Bomer, Zoch, David, & Ok, 2010).

Methods

This study investigated a third-grade student in her natural, classroom environment and relied upon data sources consistent with case study research (i.e., field notes, interviews, and artifacts) (Dyson & Genishi, 2005; Yin, 2009). In the following sections, the context, participants, data collection, and data analysis are described in detail.

Context and Setting

This article represents analysis of part of a larger study that took place in an elementary school that is a magnet for the arts and humanities (Wiseman, Kupianinen, & Makinen, 2016). In this study, Angela documented a third-grade classroom in a diverse urban public school that integrates photography into the language arts curriculum as a central component of reading and writing instruction. In the classroom, there were 22 students: 8 males and 14 females; the students identified their racial background as Hispanic (4), White (7), Black (10), and Multi-racial (1). Five of the students received services because the school identified them as Academically Gifted and four received services for English Language Learning. The teacher reported that twenty percent of the students passed their state reading test, which is the end of the year exam that involves vocabulary and reading comprehension questions.

Ms. Brown (all names in this article are pseudonyms), the teacher of this classroom, identifies as a Caucasian woman who has taught in public schools for more than 10 years. She implemented an art-based curriculum called Literacy Through Photography (LTP) into her reading and writing instruction. Students used critical thinking and creative understanding as they completed projects related to three themes: self-

portrait, proverbs, and community. In each project, students worked in groups to develop ideas by using photography, drama, art, writing, reading, and other methods of understanding. Each of the three projects took approximately three to five weeks to complete and were integrated in the language arts curriculum throughout the school year (see Wiseman, Kupianinen, & Makinen, 2016; Wiseman, Pendleton, Christianson, & Nesheim, 2015).

Data that comprised the final project, “My Community,” is the focus of this case study. In this project, students began by reading books and conceptualizing how they might define community. They created maps, labeled different features, and thought about various modes of representations (e.g., pictures, colors, sounds). Students took a 35mm camera home for one or two nights and photographed 12 scenes representing their communities. After studying their negatives and discussing how their visual representations reflected their communities with others, students selected one picture to develop in the darkroom. As they developed their pictures, they learned about exposure, light, chemicals, and other aspects of image development affecting the meaning, tone, and mood of a photograph.

Ellie: An Illustrative Case Study

We chose to focus on Ellie; she was a student who was described by her teacher as “struggling” with reading and writing. Ellie identified as an African-American female; she was one of many students in the classroom who had not passed the state reading test and was targeted as a student of concern. She did not qualify for any school services and did not have an Individualized Education Plan. However, the teacher integrated visual learning into her

guided reading and writers workshop as instructional opportunities to meet Ellie’s needs. Ellie was an illustrative case (Creswell, 2013), providing us with the opportunity to delve further into understanding her meaning-making with a multimodal curriculum.

Ellie was very motivated and engaged in class, but she seemed to struggle with articulating her thoughts in writing and comprehending reading texts. Ellie identifies herself using positive language— “friendly, good listener.” Reading was her least favorite subject because “it is so quiet. She added, “I don’t like quiet.” She enjoyed interacting with others and preferred any assignments where she could work collaboratively in groups. Ellie comes from a family with two brothers and two

“In each project, students worked in groups to develop ideas by using photography, drama, art, writing, reading, and other methods of understanding.”

sisters and lives in an apartment a few miles from school. Ellie is close to her family, and she told Angela that if she had to photograph her most important thing in her life, that “it would be [her] family.” As Angela documented Ellie across the school year, it became clear that photography was a tool that

supported her literacy learning, particularly her written expression. Ellie explained that photography helped her remember details and “add information in [her] mind.” She told Angela that when she uses photography, “I can add more details. After I looked at it and imagined it, I added more details [to my story].”

Data Collection

In the larger study, Angela applied ethnographic techniques of participant-observation and descriptive analysis in the classroom setting as data were gathered, on average twice a week, throughout a full school year (Creswell, 2008; Kamberelis & Dimitriadis, 2005). A case study approach was used

to provide an in-depth, multi-dimensional consideration of this classroom by drawing on multiple data sources (Dyson & Genishi, 2005) to examine and describe the LTP program in this third grade classroom. Data sources included classroom observations, student writing and photographs, interviews, and discussions. During the photography projects, Angela observed and videotaped students, collected work samples, and informally asked questions about their work. After each of the three projects was completed (i.e., self-portrait, proverbs, and community), Angela conducted a retrospective think-aloud protocol (Schellings, Aarnoutse, & van Leeuwe, 2006) with Ellie after each project using multimodal interviews. For the retrospective think-aloud, Angela sat down with Ellie and viewed the various multimodal artifacts for each project and she asked open ended questions about how she designed the artifacts and how the artifacts reflected her understanding of the project. Examples of questions include, “What were you thinking about when you created this (mode, example photograph)?” and “Explain what this (mode, example sketch) means?”

Data Analysis

Data analysis occurred in two different phases. The first phase occurred in the larger study and involved using descriptive analysis to create a thick description of the LTP program, language arts block, and classroom routines (Merriam, 2009) and thematic analysis to determine the impact of multimodal instruction on student learning (Miles & Huberman, 1994). Interviews with the teacher and students, student work, and field notes were used for describing the classroom context (Yin, 2009). The themes from the larger study reflected three main ideas about student learning: (1) students’ options for meaning making expanded when working with photographs; (2) student learning and engagement increased from integrating students’ experiences in the curriculum; and (3) the visual

medium of photography provided a deeper and expansive mode of learning in the language arts classroom (Wiseman, 2011).

After the data collection and initial analysis were completed on the larger data set, Angela began the second phase of data analysis by collaborating with three other literacy researchers who are also the co-authors of this article using multimodal interaction analysis (Norris, 2004; see Wiseman et al., 2014). Multimodal interaction analysis is a framework that provides a means to capture the perceptions, thoughts, and feelings people express as well as the attention and awareness levels they exhibit through both embodied modes (i.e., spoken language, posture, gesture, gaze, and head movement) and disembodied modes (i.e., music, print, and layout). (Norris, 2004). Discourse analysis, interactional sociolinguistics, mediated discourse analysis, and multimodality inform this qualitative framework. Our purpose for examining the videos using this process was to illuminate the complexity of Ellie’s learning and understand moments of struggle and success.

Our collaborative data analysis sessions began with discussion of significant themes, literacy events, and ideas that took place in this classroom. We reviewed data from the focal students and discussed how to identify segments of video clips for the purpose of conducting a microanalysis, which can be defined as a more detailed form of coding (see Wiseman, Pendleton, Christianson, & Nesheim, 2015). As a team, we devised our interpretation of multimodal analysis and applied it to three students who were identified as struggling with reading and writing in the classroom. Ellie was selected because we felt we would learn about the complexity of her learning through the research methods; we selected five episodes that reflected her progression of learning in a multimodal LTP project that was about community. The episodes included Ellie’s writing reflection after an initial brainstorm, her discussion

of the negatives she took of her community, her description of the picture she developed, her elaboration on her community, and her reading of the final product after developing her picture and writing her story.

Modes such as proxemics, gaze, posture, head movements, music, and language are part of a semiotic system that Norris (2004) refers to as communicative modes. For the purposes of our data analysis, we focused on the modes of gesture (hand and arm movement only), posture, gaze, head movement and spoken language because they seemed most relevant to our study. The modes were considered as follows:

Gesture. Defining gesture as how she moved her hands as she spoke, we considered how Ellie used gestures and noticed that she often used gestures when her modal density was at its peak. This indicated that she was using many different ways of communication and she could be struggling or engaged during these times.

Posture. Posture describes how she positions her body in relations to others. An important aspect of posture was how posture changes when interacting with other people; we could see her lean in when she was engaged or move away to break off interactions with others. It is important to note that Ellie's engagement in both class settings and interview settings was inferred largely through the coding of posture.

Gaze. To understand gaze, we followed Ellie's direction and intensity of eye contact. We also analyzed Ellie's head movement, or the way a participant holds her head (Norris, 2004). In the majority of the clips, Ellie's gaze enabled us to make

stronger inferences about her engagement levels and attention foci.

Head movement. We focused on head movement, considering where her attention was directed. Ellie's head movement in our video data primarily alternated to focus on image negatives, the researcher, her writings, and her peers.

Spoken language. In addition to non-verbal communicative modes, we carefully analyzed Ellie's spoken language. We analyzed transcripts of Ellie's spoken language in the classroom and during her interview session.

We coded each video clip separately with our assigned individual communicative modes, and we also wrote research memos on observations while coding. We ultimately realized that modes such as posture, gesture, gaze, and head movement played as critical a role as verbal modes because they carry "interactional meaning as soon as they are perceived by a person" (Norris, 2004, p. 2). The clips were presented to the entire team for discussion and further analysis. When there were differing opinions regarding coding, we watched the clips together repeatedly until we came to a consensus on the analysis and interpretation.

In addition to coding modes, we also analyzed the clips for both modal density and modal dissonance since they represent generative places that either reflected sources of struggle or opportunities for learning (Norris, 2004). Modal density occurs when participants in an interaction draw upon several modes at once or draw upon numerous modes in quick succession (Norris, 2004). We defined modal density as instances where Ellie actively demonstrated at least three modes at once. Modal dissonance refers to the notion that the

“We ultimately realized that modes such as posture, gesture, gaze, and head movement played as critical a role as verbal modes...”

Time	Spoken Language	Gesture	Posture	Gaze	Head Movement
41.00-41.05 	It's a lot of sounds but I'm not around when things go down	beat gesture with hand back and forth on table while reading	open; standing; open to class engaged (in reading)	mutual gaze (w/teacher) and directional gaze (at teacher) then out to class then directional at paper when asked to read	looked down while reading; directional

Figure 1. Excerpt from our microanalysis of Classroom Clip demonstrating a modal ensemble.

communication of the different modes seems to be in opposition.

Researchers' Roles

All four participants of this research team identify as Caucasian women and have had English/language arts classroom teaching experiences. We have all had classroom teaching experiences and have explored ways that we could develop learning opportunities for and with students. We have particularly been concerned about our students who are marginalized, particularly those labeled as “struggling” due to linguistic or cultural diversity. Our goal is to develop research methodologies that acknowledge the complexities of classroom response

and, rather than approach students as “struggling,” promote the idea of understanding students’ literacy practices as complex and affected by social contexts.

Working with a teacher who incorporated photography seemed like an opportunity to understand how students respond to a multimodal curriculum. Our goal was to employ multimodal methods of data analysis in order to illuminate and explore the complexity of Ellie’s literacy practices in the classroom.

Findings

During the three different clips that were reported in this section, we gleaned information about Ellie’s learning, specifically how important it was for her to

Time	Spoken Language	Gesture	Posture	Gaze	Head Movement
41.31-41.40 	E: Um, doors closing.		Open Standing Engaged; more so when finished and facing teacher	Directional gaze (at teacher) when finished reading, then partial view of unsystematic gaze.	Looked up when finished Directional

Figure 2. Excerpt from our microanalysis of Classroom Clip demonstrating a change in Ellie’s communicative modes.

use photographs to organize her thoughts. However, we found that certain types of questions or feedback could affect her ability to participate. In this section, we reveal how our microanalysis provides insight on her meaning making for this project.

Sharing her Story: Ellie's Initial Shut-Down

The focal lesson began with the teacher leading students to consider how multiple interpretations can exist within a visual image. In a later interview, Ms. Brown explained that the idea behind her introduction was to acknowledge the multiple ways of interpreting images and ideas and that she wanted to “open up the idea of multiple interpretations.” This notion of multiple interpretations was explored further when the class read the book *Black Cat* (Myers, 1999), in which community is described through the eyes of a cat.

In clip one, Ellie's full attention is devoted to volunteering to read a story she wrote in response to *Black Cat* (Myers, 1999). When the teacher calls on Ellie, Ellie looks up, holds her gaze on the teacher while she stands, positions herself and her paper, then shifts her gaze down as she begins reading. As she reads aloud, her posture remains open and engaged. Our microanalysis (see *Figure 1*) revealed the modal ensemble created by her spoken language, gaze, posture, gestures, and head movement. We viewed this data as evidence of the importance Ellie placed on the opportunity to contribute to this classroom.

Upon completion of her reading, Ellie looks outwardly at the teacher. Edward, a student who is sitting at her table, leans towards her and says, “That sounds like a poem.” Despite Edward's comment, Ellie does not break her gaze with the teacher. Ellie's teacher focuses on a specific response that is more of a critique; the teacher responds that Ellie should clarify her writing by adding more concrete descriptions of sounds in her community, and as a

result, Ellie's communicative modes change drastically. Her verbal response becomes sluggish, abrupt, and minimal (see *Figure 2*).

Analysis of the text *Black Cat* alongside her writing demonstrated that Ellie exhibited sophisticated writing that mimicked the rhyme and repetition of the text by Myers (1999). Her writing matched the community theme of the lesson and mirrored poetic features of the text. Ellie inserts her perspective into this poem, and her voice is strong. She uses descriptive words and incorporates language in ways that are rhythmic and rhyming. Her use of repetition, words such as “round” and “a lot goes down,” gives the poem a cadence and flow that have dramatic effect. The descriptive phrase “dreaming of bright sounds” provides strong imagery of Ellie's interpretation of community; she is even there when she is dreaming. When Ellie describes that “a lot goes down when nobodys [sic] around,” she alludes to how things are happening in her community, even when she is not there. Even when she is sleeping, Ellie identifies as part of the community and feels that she plays an integral role.

The teacher provided more of a direct or focused response. Returning to Halliday's (1977; 1978) notion of meaning potential, it is clear that there were parameters to what was an acceptable “braindrain” in this classroom. Our microanalysis revealed that the manner in which Ellie focused on the language and organization of the picturebook actually conflicted with her teacher's intentions for the writing assignment. Children access resources purposefully in various social contexts that define and address certain forms of literacy (Ranker, 2009), yet those resources may not match the intended purposes of the teacher. While Ellie's focus when she wrote the braindrain was on rhyme and rhythm of text, her teacher's intention was to have students incorporate specific visual images from their community. Ellie's approach differed from her teacher's goals for this assignment as her response

demonstrated attention to language and rhythm exemplified in the picture book. Because the larger project was to have students photograph aspects of their community, we can see the purpose of focusing on concrete images in lieu of poetic elements. However, as we watched Ellie’s gaze fall and her gestures slow down, we saw that the response from her teacher reflected different expectations. Ellie

During the second part of the project, students worked on conceptualizing and describing their communities through photographs. During this process, Ellie took twelve pictures, brought her camera back to school, and selected one negative to develop in the darkroom. We selected three separate clips from an interview that Angela conducted with her in the library regarding her project.

Time	Spoken Language	Gesture	Posture	Gaze	Head Movement
8.03-8.07 	and I just think that it’s interesting. A1: Me too. Now, if you were going to pick three words	Puts her hand on her face (more posture than gesture)	Open; directionally facing photograph. One-two shift begins at 8.07 and completes at 8.08 >	(Directional) Looking down at picture while talking and looks up at A1 and out at something in room	Directional shift looking up
8.08-8.12 	to describe your community what would they be? E: hmmm	Moves hand from mouth to in front of body (more posture than gesture)	At 8.08, Ellie completes a one-two shift directional turn to face A1. She remains open and engaged.	(Shifting) Looking at A1 while she’s asking question; glance at door, at right, then down at picture.	Directional shift looking down
8.13-8.17 	E: well behaved, <u>ahh</u> A1: mm hmm E: interesting, <u>ahh</u>	No hand movement		Arbitrary glance outward then looks back down at picture while answering question	Mild directional shift

Figure 3. Excerpt from our microanalysis of Photograph Clip Three demonstrating modal dissonance.

attempted to successfully contribute to the lesson, but it seemed to us she was not positioned as a successful participant. In this context, her chosen way of responding to the picturebook did not fit the intentions of the assignment.

Accessing her Community: Describing Photographs and Writing

Our multimodal analysis revealed how important the images portrayed by the negatives were to the way Ellie articulated her thoughts. Ellie’s movements, gestures, and gaze all indicated that she was leaning on these images to respond to questions that Angela posed, indicating high engagement in the conversations. Her use of gestures increased, and she was very animated as she described her

photographs. Ellie was clearly impassioned to explain her conceptualization of community. The meaning making that ensued reflected a connection among images, words, body language, and social interaction.

However, when Angela asked very specific questions about the project that were devised for the research interviews, Ellie’s response was quite different. During this section of the interview, Angela asks Ellie to list three words that describe her

the first clip. There was a mismatch in the questions and Ellie’s own understanding of her community.

During the different clips that were reported in this section, we gleaned information about Ellie’s learning. Her motivation, engagement, and learning were best reflected through open-ended conversations and when she had access to her visual images. In other words, the multimodal curriculum was providing her with opportunities to express and communicate in ways that were productive for her

First draft of community story	Final version of community story
<p>In my community it's a lot around and lots of sounds but a lot goes down. But remember it's a lot around and a lot of sound but things go down around in my town it's a lot of sounds but I'm not around when things go down and, because I'm laying down and dreaming of bright sounds when I'm not around a lot goes down when <u>nobodys</u> around they're listening sounds around.</p>	<p>The Pond. Daddy, can't we go to the pond? Yes. We speed walk there. We don't want to miss the geese. We look around in silence. We see geese swimming. We hear waves going through the water. We smell dandelions. We imagine the spaghetti and garlic bread for dinner. Then we started to race to the door.</p>

Figure 4. Ellie’s first and final versions of her community story.

community. The matrix above (see Figure 3) shows how Angela guided the conversation and how Ellie’s responses change.

During the initial interview in which questions were open-ended, Ellie was highly engaged; however, we observed a distinct change in her communicative modes. Specifically, when Angela asked Ellie to use three words to describe her community, Ellie’s speech was halted, and other communicative modes were disrupted. Ellie looked downwards toward the negative and broke eye contact during this question. Ellie’s communicative modes demonstrate less engagement and decreased participation with specifically focused questions and are an example of modal dissonance. These specific questions were not connected to her ideas or intentions about the picture. In many ways, this response to Angela’s narrow question and answer request paralleled her initial experience as she shared her “braindrain” in

learning. However, she was clearly affected by directed or specific questioning that limited the way that she could conceptualize and respond to ideas or concepts. Also, at times, her responses were not aligned with expectations of the teacher or the interviewer. These connections between expectations and her response demonstrated how certain expectations from teachers (or interviewers) positioned students to be “struggling” (Triplet, 2007).

Reading the Community Story

In the last video clip, Ellie read the final version of her community story. At this point, Ellie stood in front of both her teacher and classmates to read the piece she has composed about her community. The act of reading her work aloud to her peers is one she took seriously, and the video clip reflects this intentional focus. Ellie’s reading reflected high modal density (Norris, 2004); our analysis showed

that she was completely focused on reading her story, and all modes demonstrated her intensity and engagement. Ellie's final and revised story was as follows:

The Pond. Daddy, can't we go to the pond?
Yes. We speed walk there. We don't want to miss the geese. We look around in silence. We see geese swimming. We hear waves going through the water. We smell dandelions. We imagine the spaghetti and garlic bread for dinner. Then we started to race to the door. The End.

As Ellie read her story, she stood still and looked down at the paper she was holding. Her posture was open; her body upright and engaged. She read fluently and did not stumble over any words. Toward the conclusion of her story, she briefly looked up at the camera. When she completed her reading, she looked directly into the camera, bounced on her toes in a quick up-down motion, and smiled.

There is a contrast between Ellie's first draft and her final copy in her communicative modes as well as response to the story. The first draft is the result of a five-minute "brainrain" wherein students were asked to write about people or sounds in their community. The final version of Ellie's community story was written after talking with her family, taking twelve pictures that were observed as negatives, and selecting the picture that represented her community to her. She used that picture to write the story and was positioned as a skillful writer. Ellie read with a quiet voice but without any of the movement and distractions from her earlier reading. Ellie did seem to look up for approval once toward the end, but she quickly returned to reading. When she was finished reading, Ellie looked up at the camera and gave a huge smile; in this final clip, she exudes confidence.

In the first draft, Ellie was focused on the author's style. Her writing featured repetition of words and a rhythmic style, which echoed Christopher Myers's (1999) description in the story. Her integration of "dreaming" evokes images of strong memories of what she considers community. She incorporated creative language with her word choice and the sounds she included. The final draft reflects a conversation with her community that was influenced by her experiences outside of school. She integrated very specific images that we could see in photos and her attention to these images supported her storytelling. She also used the collective "we" along with specific conversations and references to her family, referring to memorable moments she spent with them.

This literacy through photography assignment built on Ellie's experiences outside of the classroom, and in both versions of the story, we see evidence of her strengths as a writer. In her initial draft, she capitalizes on the business, noisiness, and brightness of her community; our impression is that she is a part of a vibrant one. In addition, we can see that her father offered her guidance in this instance and encouraged her to think about how they defined community by what is important to the family (e.g., landmarks, people). In this way, Ellie was building on the funds of knowledge and the experiences available in her home (González, Moll, & Amanti, 2005). Our microanalysis revealed the nuances of the home-school relationship and its implications for Ellie's literacy practices.

Discussion and Implications

We observed how important it was for Ellie to have the opportunity to guide her own meaning making. Ellie's final product incorporated various aspects of her poetic voice, community knowledge, and understanding of the assignment. We have three main implications from this research that include

the potential for multimodal learning in the classroom and the importance of video data analysis.

Potential for Multimodal Learning in the Classroom

Despite being engaged and interested in school, Ellie struggled to meet local and state literacy benchmarks. She enjoyed peripheral success; however, the Literacy Through Photography project allowed Ellie to bring aspects of her community into the language arts classroom and showcase her writing skills. The visual image provided more than a fixed representation of her community; her photograph opened semantic pathways (Halliday, 1978) and allowed her to build meaning across modes. For Ellie, we see that creating school texts or responding to teacher-directed inquiry was a challenge. In the first clip, we observed that her spoken language was slow when trying to meet her teacher's requirement for sound in her work (see *Figure 1*). We viewed this again in the second clip when Angela asked her to give three words that describe her community (see *Figure 3*). However, when Ellie was able to rely on photographs, her speech was more fluent, and her writing was more complex.

We see potential for students to develop their writing abilities through the use of photography or other multimodal means in open-ended ways where students have time and space to reflect and develop their own meanings. Children construct the world with semiotic resources that are available (Gilje, 2010; Kyser, 2015). The opportunities that students have to respond and participate within literacy events of the classroom play an important role in the opportunities they have in their lives. In this particular case, the photographs supported Ellie's

meaning-making. Photography provided an opportunity for Ellie to participate in new literacy practices as she integrated values, meanings, and perspectives from her community.

Video data analysis

Video data analysis offers insights into struggling readers' behaviors that may otherwise be missed. For example, our microanalysis revealed times when Ellie demonstrated modal density; therefore, at least three communicative modes were active (i.e., spoken language, gesture, gaze, posture, head movement). At such times, Ellie was the most talkative and constructed more complex meaning. We noted that during times of modal dissonance, Ellie struggled to make meaning.

“The opportunities that students have to respond and participate within literacy events of the classroom play an important role in the opportunities they have in their lives.”

Microanalysis has the potential to help researchers pinpoint times when modal dissonance occurs and lead to a better understanding of how students do and do not construct meaning. For example, researchers may ask:

- Are struggling students able to convey complex meaning without modal density?
- Do struggling students rely on artifacts when formulating answers to open-ended questions?

Microanalysis may offer literacy researchers a new tool for investigating ways to meet the needs of struggling readers and writers. While this type of analysis may be impractical for practicing teachers, it demonstrates the need for further understanding of body language, gaze, and attention of students.

Limitations

Although we followed a rigorous process when conducting this microanalysis, we recognize that this study has limitations. In particular, our perceptions as white middle-class women may have led us to make assumptions about Ellie that differed from how she would have positioned herself. Moreover, this single-subject case limits our ability to generalize the findings. These lessons learned about Ellie's progress within a multimodal project express her communicative modes, which are not necessarily transferrable to other readers. We realize that since one researcher on this team collected data, this could represent a potential limitation of the study. However, our team spent extensive time discussing various modes, analyzing videos of multiple students from the classroom, and corroborating each other's analyses. The collaboration ensured an in-depth focus that could not have been achieved by a single researcher. However, we maintain that increasing knowledge of incidents of modal density and dissonance (Norris, 2004) exhibited by other readers who, like Ellie, are marginalized and separated from academic success may yield rich understandings of how to support all students.

Conclusion

The findings of this study expand upon extant research and demonstrate how a “struggling” student can use multimodal texts to transition to “success.” We hope educators can see the strengths of such transformations and provide opportunities for multimodal engagement in their classrooms or learning contexts (Siegel, 2006). The findings of this study may encourage further understanding of how multimodal approaches benefit all learners, including those who struggle. Research on multimodal methods of teaching and learning demonstrates how many ways of understanding response and engagement are being re-visioned as we recognize the impact of expanding options for making meaning. Findings from this study support expansive practices that elevate students' reading and writing skills through meaningful multimodal experiences.

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