

# Putting a Focus on Social Emotional and Embodied Learning with the Visual Learning Analysis (VLA)

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#### Abstract

Research increasingly recognizes the importance of social emotional and embodied learning in early childhood, and yet few studies provide early childhood researchers and teachers with tools for documenting and interpreting the meanings made in these languages. At the same time, many early childhood teachers in Reggio Emilia-inspired programs and others take hundreds of photographs for documentation of children's learning, and yet are uncertain about what to look for in them. In this qualitative study, which occurred in a Reggio Emilia-inspired preschool classroom in the southeastern U.S., photographs from regularly occurring classroom activity were analyzed with a research method called the Visual Learning Analysis (VLA). The VLA revealed evidence of children's social emotional and embodied learning and made visible the teacher's value of children as capable of reflection and of making choices about materials and learning spaces. It offered an opportunity to discuss how children explored and used materials according to their own timeframes within authentic social relationships. Findings from this study indicated that the VLA is a useful tool for teachers and coaches, as well as researchers, to see more in photographs of children engaged in classroom activity and suggest that the VLA process can support early childhood teachers' professional development.

Keywords Social emotional learning  $\cdot$  Embodied learning  $\cdot$  Visual analysis  $\cdot$  Photography  $\cdot$  Arts-based research, Reggio Emilia

In a 10-week drama residency, a group of three, four, and five-year old children are enacting the story of Jack and the Beanstalk with the help of two drama educators. The adults who guide the children's pretend are in the roles of Jack and the Giant, and in one of several adaptations from the traditional tale, the children take on the roles of all of Jack's brothers and sisters. Today the plot calls for the children to risk waking the sleeping giant in order to rescue the golden harp. Kathryn Whitmore (first author), who is researching the affordances of drama education on literacy learning, sits on a small wooden chair near the carpet, field notebook in hand, writing field notes as the children pretend to

Kathryn F. Whitmore kwhitmor@msudenver.edu climb up the beanstalk and crawl under the castle door. As the children tiptoe past her chair toward the Giant, she writes, "The children make eye contact with me as they creep past me in the circle. Their eyes are dancing and convey a conspiratorial and delighted look. Their faces are gleeful."

The Visual Learning Analysis (VLA) was born out of this moment, when Kathryn realized the unsatisfactory limitations of written field notes for conveying young children's engagement and joy during genuine and active learning. Findings from the study in which this moment occurred (Whitmore 2018) indicated that engaged learning increased in emotionally intense moments (when the children hid from the stomping, scary giant in an imaginary closet) and when children moved (climbing, dancing, tiptoeing, chopping). Recognizing that "matters of meaning are shaped—that is, enhanced and constrained—by the tools we use" (Barone and Eisner 2012, p. 1), when she extended the study in a different preschool setting, Whitmore (2015)<sup>1</sup> added methods

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<sup>&</sup>lt;sup>1</sup> In its early development the Visual Learning Analysis was called the Semiotic Photo Analysis Protocol (SPRP) and this term was

of photography and video to preserve engaged learning moments for further analysis of emotional and embodied learning. Also intending to bring participants into the center of the research process, she developed the VLA procedures in collaboration with a study group of participating preschool and drama educators, one of whom was Christie (second author). The current study was also situated within the value of teachers-as-researchers (Cadwell 1997), a tenet of Reggio practice and philosophy in which teachers "engage in continuous discussion and interpretation of their work and the work of children" (Cadwell 1997, p. 6).

#### **Literature Review**

Young children's engaged and active learning is increasingly understood to be social and emotional and to involve active, moving bodies. Epstein (2009) says social learning is comprised of "the principles and strategies for interacting successfully with others" and defines emotional learning as "the knowledge and skills needed to recognize and self-regulate feelings" (p. 4). Social emotional learning descriptions often reference emotional awareness, becoming empathetic, cooperative play, and problem solving (White et al. 2017) among many dispositional attributes.

Early childhood research regarding social emotional learning is often quantitative in nature and seeks to understand how well social emotional learning affects school readiness (Denham and Brown 2010), occurs when taught with specific curriculum (Moore et al. 2015), and varies across groups or geographic regions (Schmitt et al. 2018). In one study, such attributes of early social emotional functioning in kindergarten were found to predict children's future wellness as adults (Jones et al. 2015).

As Claxton's recent book title, *Intelligence in the Flesh* (2015) suggests, a growing literature of qualitative research advances knowledge about how learners' bodies are an unrecognized and untapped symbol system that are disciplined, emotional, social texts (Enriquez et al. 2015). Lysaker (2019) analyzed video recordings of young children as they read wordless picture books, attending to how "body readings" involve gaze, prosody, facial expression, gesture, and dramatization "for sense-making in children's social and physical worlds" (p. 35). In parallel, Rowe (2019) used multimodal qualitative analysis techniques to understand the role "pointing, placing, and tracing gestures played in two writing contexts for 2.5–3.5-year old writers" (p. 36). She found that "[a]s children pointed to the page with a pen

in hand," their gestures "serve[d] as a launching point for learning to write" (p. 37). Movement, along with ritual and pretend "were ways young literacy learners of all abilities *became the story*" as they enacted Jack and the Beanstalk with drama in the study mentioned above (Whitmore 2015, p. 25, emphasis in original). Enriquez (2015) named these understandings of embodied learning "body poems"—ways children's bodies make and communicate meanings. Her research analyzed embodied performances of children in classrooms and ways educators regulate and validate the meanings generated by children's bodies.

Few studies provide or fully describe tools for documenting the elusive meaning making children accomplish related to social emotional and embodied learning, in part because conventional research methods are limited to written formats (interview transcripts, field notes, survey responses). In this article, we describe the Visual Learning Analysis (VLA) and demonstrate how we use it to evoke viewers' analysis of learners and social emotional and embodied learning. In the next sections we describe the research context, followed by a detailed description of VLA procedures and their grounding in qualitative arts-based methodology. We share illustrations of the products generated in the VLA as we describe findings from its use in one preschool classroom. We invite readers to look closely at VLA outcomes with two photographs and to listen in on our conversations about children's social emotional and embodied learning. To conclude, we offer recommendations for practitioners, including classroom teachers and early childhood coaches, that suggest possibilities for classroom uses of the VLA.

#### The Research Context

We have worked as a team for 3 years in a professional development project called the Excellence Academy, in which to date more than 60 teachers have been coached to implement Reggio Emilia-inspired early childhood practices. Kathryn and Christie are university researchers, Jennifer is an early childhood coach who provides training, guidance, and technical assistance to infant through preschool teachers in the Excellence Academy, and Shauntá is a preschool teacher. This research occurred in Shauntá's preschool classroom of 4- and 5-year-olds. It was part of a larger, ongoing, multi-year qualitative study that documented the process of change as Excellence Academy teachers learned about and enacted Reggio philosophy and practice. The larger study data included fieldnotes from approximately 100 observations of classrooms and professional development events and more than 50 interviews with nine focal teachers, their center directors, and their coaches.

Excellence Academy coaches, teachers, and administrators are inspired by the Reggio Emilia approach, the

Footnote 1 (continued)

used in early publications (Whitmore 2015; Chisholm and Whitmore 2016).

early childhood philosophy that arose in Italy in the mid 1900's and gained traction in the United States and other areas of the world (Edwards et al. 2012). According to Loris Malaguzzi, its founder, educators must first reflect on their image of the child (Gandini 2012a). Shauntá and other Excellence Academy teachers work to view "children as competent and deserving of respect, while valuing different cultural funds of knowledge as equally worthy" (Curtis and Carter 2013, p. 9). They develop classroom curriculum studies that encourage active learning, risky play, and problem solving. Strongly connected to the view of children as competent and capable is the concept that in addition to the parent and the classroom teacher, the environment is a "third teacher" (Biermeier 2015). Reggio educators believe that carefully attending to room arrangement, available materials, and aesthetic dimensions in a classroom facilitates children's learning. In these environments, "[w]ords, drawings, materials, colors, and objects carry the voices and thoughts of the children and tell about them during their absence" (Gandini 2012c, p. 327).

Keystone Academy, where Shauntá teaches, is tucked in the center of one of Louisville, Kentucky's lowest income housing projects. Keystone is a nurturing space for 70 infants through preschool-aged children from African American and Somali refugee families. Shauntá provides a rich physical environment for learning and creates invitations and curriculum studies in response to children's interests by actively listening to and observing their play. She says, "My teaching tactics have really changed since [I became] Reggio inspired. It's been a journey, a good journey." Like other Reggio teachers, Shauntá takes hundreds of digital photographs and uses them to tell stories about children's learning on documentation boards and in learning stories (Forman and Fyfe 2012). Shauntá and her coach, Jennifer were interested in participating in the VLA process to examine such photographs more deeply.

#### **Problem Statement and Research Questions**

Excellence Academy teachers take photographs to preserve, think about, and share their observations and reflections about children's explorations (Gandini 2012b). Jennifer explained a challenge for teachers who are learning about Reggio practices: "Teachers take all these pictures and they don't know where to go from there. How does this show the image of the child? How does this show the environment as third teacher? The VLA would really help a teacher be able to think about that in a way that really makes sense to them." In this article we report on our exploration of the VLA in response to this challenge. Our study was based on the following research questions: What do photographs reveal about children's social emotional learning? What do photographs reveal about children's embodied learning? How are the Reggio Emilia tenets of children as competent and capable and environment as third teacher visually evident in photographs?

#### **Data Collection and Analysis Procedures**

This qualitative study was designed in concert with our view of children as competent and capable protagonists of their own learning who are worthy of study, and our view of early childhood practitioners as co-researchers. Leavy (2015) says arts-based practices are particularly useful for qualitative research designed "to describe, explore, or discover... [in contexts] where the problem at the center of research dictates the methodology" (p. 21, emphasis in original). Kathryn created the VLA process to facilitate dialogue about regularly taken photographs and to generate additional data about the focus of a specific study. Having used the VLA in previous studies with classroom teachers, arts educators, middle and high school students, and researchers (Chisholm and Whitmore 2018a; Whitmore and Chisholm, in press; Whitmore 2015), we wanted to experience its potential to deepen Excellence Academy teachers' analyses of photographs.

The VLA process invites looking closely into photographs of learners during their regular classroom activities to answer questions about learning and teaching. All of the photos we use for the VLA are taken during regular classroom activities as part of documentation-none are posed or taken explicitly for the purpose of the VLA. Shauntá typically prints photographs she's taken with an iPad to create and display learning stories and documentation boards. The two photographs that illustrate the VLA process and our findings in this report (Figs. 2 and 3) were taken by Christie and Shauntá in Shauntá's classroom using an iPhone or iPad. Although no cropping or editing adjustments to the color or light were made before they were printed on regular paper with a color printer, we recognize that all photographs are representations created by the photographer. Thus, photographic images carry multiple, flexible meanings and are interpreted accordingly, through the varied lenses of those who make and view them. They change according to the context of their viewing (Leavy 2017; Tinkler 2013).

The VLA process begins with decisions about which photos of naturally occurring activity to print for investigation. Kathryn looked to Tobin et al. (2009) seminal multivocal ethnography for direction about photo selection. These researchers "artfully constructed" (p. 12) edited videos of preschool classrooms in China, Japan, and the United States, which they showed to informants to elicit interview data. Their editing decisions were guided by their intention to include compelling characters and dramatic content, and to

### **Visual Learning Analysis Procedures** LEVEL 1 Spread printed color photographs on a large table. Participants look at them collectively. Ask: What do you see here? How are learners' bodies making meaning? What are teachers' bodies doing? LEVEL 2 Participants select one photograph each that is particularly indicative of themes to understand more clearly, such as play, literacy learning, and risk-taking. Participants tape these photographs onto legal-size blank paper and draw and write on them to label what is evident at a micro-image level. Direct participants through the following series of prompts: Eyes: Notice the eyes of each person in the photo. Who or what are they looking at? Who is looking away? What are the expressions of the eyes communicating? Hands: Where are the hands of key players? What do gestures convey? Posture: What meanings do bodies convey? Who leans toward others? Who leans away? Positioning and proximity: How are bodies positioned in the space? Who is close to whom? Who is separated? LEVEL 3 What is the image of the child? How is the environment as the third teacher visible? LEVEL 4 Participants share their individual analyses with the group.

#### Fig. 1 The visual learning analysis procedures

be aesthetically appealing. They described how the videos "function as a set of interview questions, and are narratives, with central characters and dramatic tension. The videos must produce emotional as well as intellectual reactions in viewers to function as effective ethnographic interviewing tools" (Tobin et al. 2009, p. 12). These attributes guide our photo selection, as well. We intentionally select photos that we know will engage viewers and potentially promote interesting discussions, which means "we participate in shaping the range of learning stories available to elicit certain kinds of responses" (Chisholm and Whitmore 2018b, p. 34).

Once photos are selected and printed, they are spread out on a table where a small group of participants examines them collectively (Level 1, see Fig. 1), then individuals select one photograph to study more deeply. The prompts in Levels 2 and 3 guide their study, and they make notations on the photographs by writing, circling, drawing lines, describing, and interpreting what they see in the images. This individual part of the VLA is designed to recognize the multiple truths and interpretations individual viewers can contribute and complements our intention to work within the Reggio principle that Excellence Academy teachers are researchers. Finally, Level 4 returns to a group conversation in which individual insights are shared and discussed. All conversations are recorded and transcribed. The data generated by this process includes the notations on photographs and transcripts of the discussion that occurs in the process.

We analyzed these data in this study using an open coding, constant comparison method that allowed patterns and themes to emerge (Charmaz 2014; Merriam and Tisdell 2016). We thought recursively, read and re-read the data, jotted notes about meanings, and compared one VLA set of notations and discussion to another in search of patterns and answers to the research questions. This process led to a list of codes and subcodes, such as body positioning (leaning in, hands on hips) and attention (focus, concentration) that described the data. A further categorization of the codes made visible connections between social emotional learning and embodied learning which motivated our return to relevant professional literature, and led us to set aside some other codes, such as developing literacy (writing for meaningful reasons, drawing and writing). We recognized that

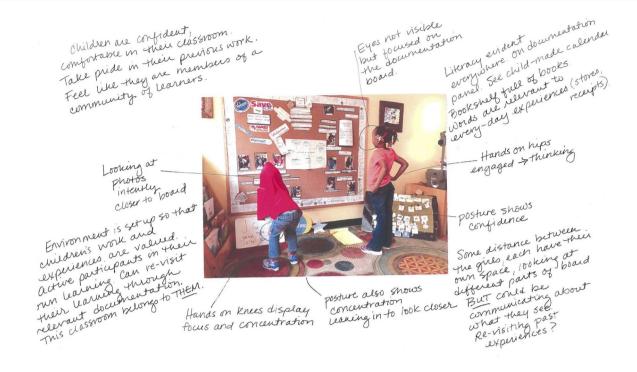


Fig. 2 Jennifer's VLA: Kazima and Dariyah read the grocery store study documentation board. (photo credit: Shauntá Miller-Crumes)

what was missing in the photographs was significant, as well, and generated a set of attributes that primarily noted an absence of regulation over children's bodies and their choices of activities, where to accomplish them in the space, and for how long.

Our goal throughout this analysis, was resonance; as Leavy (2015) writes, "Truthfulness and trustworthiness in [arts-based research] may be thought of in conjunction with the concept of *resonance*. Does the work resonate?" (p. 273, emphasis in original). Rather than seeking agreement, per se, we wanted our analysis to "ring true" (p. 274) to each of us on the research team according to our individual positions as teachers and researchers so that we could anticipate it ringing true to other Reggio-inspired educators. We share the results of this analysis in the next section by presenting two VLA examples, including notations on photographs and discussions about them.

#### Findings

For the analysis shared in this paper, we gathered around a collection of photographs from Shauntá's classroom that we selected because they presented central characters in action, sparked questions, suggested narratives, and were aesthetically inviting. Christie, Jennifer, and Shauntá each completed the VLA process with a photograph of their choice, while Kathryn facilitated, took fieldnotes and photographs,

and audio recorded. Later, as we analyzed our written marks and discussion, evidence of emotion and embodiment in children's learning came into focus. In the following sections, we present the themes of social emotional learning and embodied learning through two VLA examples. In a Reggio framework, these characteristics are thought of as languages, some among many ways that children communicate their competencies (Edwards al. 2012). These themes were evident across all the photos used for the study, and in both examples.

## Reading and Reflecting at the Documentation Board

Self-confidence, independence, and a sense of belonging are often described as part of social emotional development (Epstein 2009). Reggio-inspired teachers recognize that "emotion and cognition are tightly connected" and learn to "pay attention to other languages beyond the verbal" (Soncini 2012, p. 205). Attributes of the language of emotion became evident in the photograph in Fig. 2 when we looked at the VLA notations and listened to the accompanying conversation.

Shauntá regularly reviews her children's journals for insights into their current curiosities, and one day she noticed many children drew pictures about going grocery shopping with their families. During morning meeting—a time for children and teachers to reflect on their current studies and pose new questions—Shauntá asked the children, "What do you see when you go to the grocery store? What store does your family shop at? What do you buy there?" She recorded the children's answers on a web. The children were so excited and engaged that one of the girls said, "I am going grocery shopping in dramatic play!" Suddenly, the morning meeting turned to an animated discussion about what the children would need to transform the dramatic play area into a grocery store. The children sustained interest in the grocery store study for the next 6 months, and the dramatic play area gradually evolved to include a pharmacy and hair salon.

A documentation board, as a visible record of the children's learning, is a prominent feature of Shauntá's classroom that traces the evolution of classroom studies. In the center of the photograph in Fig. 2, Kazima and Dariyah are reading the documentation board from grocery store study, which included a border of grocery store receipts the children brought from home, the web of their questions and initial thinking, photographs of children engaged in related learning invitations, children's drawings, and children's transcribed talk about their experiences.

Jennifer selected this photo for Level 2 of the VLA process and wrote furiously around the image as we worked through the prompts. She circled Dariyah's face and wrote "eyes not visible, but focused on the documentation board." Jennifer interpreted that Dariyah's "posture shows confidence." Kazima's feet were planted, "leaning into look closer," and her "[h]ands on knees display focus and concentration." Dariyah stood proudly, hands on hips, perhaps as she recollected aloud about a previous play experience. As we discussed the image during Level 3, the body positioning of both girls stood out to us, and we read in the photo that the children were impressed with their work. Part of our conversation appears below:

- Jennifer I can't see their eyes, but I can tell they're looking intently at the documentation board. Hands on the hips shows she's confident. Hands on her knees, she's leaning in. [I see] focus and concentration. It looks like she's looking at this photo (pointing to the image). There's some distance between them, they're both looking at different parts of the board, but they could be communicating about what they see, and they're probably revisiting some past experiences.
- Shauntá Yes, they're looking at their pictures that we took of them while they was playing in the grocery store.
- Jennifer So, they're thinking about what they were doing at a previous time. I think the children are definitely confident and comfortable in their classroom. I think they take pride in their work. And

they feel like they are members of a larger community of learners. They are active learners and they are able to go back and revisit their work at any time.

- Shauntá Dariyah was reflecting back on the pictures of her friends. She was in a couple of them, too.
- Kathryn I think it's significant that it's okay for kids to... read the walls. No one's saying, "You need to find something to do." There's a quiet in it, whether they're talking or not, there's a calm peacefulness to it.
- Jennifer This is just as important as them doing something. *Doing*.
- Shauntá 'Cause they are doing something.

We considered how the photo revealed an image of children and the environment. We noted independence, children's contributions to the curriculum, focus, concentration, and pride among the many attributes evident in the photo. The very presence of the documentation board indicated Shauntá's view of children as capable facilitators of their own learning and her value of time and space for thinking and reflecting. As Jennifer noted during the VLA, "This classroom belongs to THEM."

The VLA process allowed us to stop time and think about these ideas at a micro level. It revealed to all of us how attributes of children's social emotional learning, particularly concentration and confidence, were evident in their bodies. Claxton (2015) reminds us that almost all "bits of our bodies" (p. 106) are engaged by emotions. Particularly evident in the example in Fig. 2, was how children's postures and body positioning connoted calm reflection and engagement.

#### **Making Meaning with Straws**

In Reggio classrooms, space is thoughtfully and intentionally arranged and provisioned to contribute to children's learning (Gandini 2012c). As part of the view of children as competent and capable, children have authority of their bodies for meaning making as a "language" that is part of learning. These ideas merge as children decide what materials to work with in their classrooms and select places in which to carry out their explorations. Lysaker (2019) adds, "We use our bodies and read each other's bodies in order to form connections with one another. We do not merely make sense *of* something or someone, but *with* something or someone" (p. 34, emphasis in original). The VLA process helped us see that when the environment is thoughtfully and intentionally constructed to act as the third teacher, spontaneous moments of shared learning materialize in all parts of the classroom.

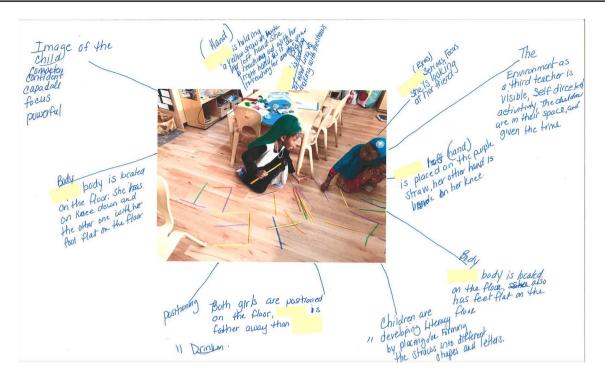


Fig. 3 Shauntá's VLA: Leylo and Fatima use drinking straws to compose meanings. (photo credit: Christie Angleton)

One morning, good friends Fatima and Leylo crossed the classroom and squatted before a low shelf filled with baskets and jars of loose parts [collections of materials that can be moved and manipulated as children best see fit (Daly and Beloglovsky 2014)]. They selected a glass jar stuffed with brightly colored straws, which they carried to an open space on the classroom floor. The photo in Fig. 3 was taken as they crouched over the straws, sliding them across the floor to create shapes and letters. As the girls' investigation expanded, so did their workspace, encompassing more of the floor with the addition of each new construction. Fatima made an *L* and called Leylo's attention to it with a soft touch on the shoulder. From a few feet away, Darrin called, "Hey, can you make a *D* for me?"

Shauntá selected this photo for analysis and recounted how over the course of nearly an hour, Leylo and Fatima spread out on the classroom floor, making first shapes and eventually letters by manipulating the straws. The girls' letter choices were not random. Shauntá recalled, "They were making the first letters of their friends' names. H for Habeeba, Y for Yaafi." Leylo produced a capital F to represent her friend Fatima's name, reversed in a common approximation for young writers. Shauntá noted that Leylo frequently reversed the e in her name, too, but maintained that she wasn't worried. She knows that when approximations are valued, and children have many opportunities to write for real reasons, letter forms continue to become more conventional (Shagoury 2009; Whitmore et al. 2004). In fact, because Shauntá provides time, space, and varied materials for meaning making, children are likely to make use of materials in a variety of ways. "That wasn't an invitation or anything," said Shauntá in elaboration of the photograph. "It was a very self-directed activity that they made themselves with loose parts."

During Level 2 of the VLA process, Shauntá wrote, "Fatima is reaching out and looking at what Leylo is making with the straws" and listed descriptions of her image of children: "competent, confident, capable, focus, powerful." She noted that both girls had their feet "flat on the floor" and that they looked at each other seriously as they worked. During our conversation in Level 3, she elaborated, "Leylo is a little farther away because they were giving each other space," and we discussed that their bodies looked comfortable and safely planted on the attractive wood floor. We conjectured that they were negotiating who would pick up the straw or talking about what shape or whose letter to make next. Because Shauntá invites children to use any available space in pursuit of their ideas and intentionally creates a classroom environment that functions as a third teacher, Fatima and Leylo moved freely in the space as they needed for discovery and learning (Gandini 2012c).

Lysaker (2019) says individuals read each other's bodies and make sense of their work together relationally. The VLA process helped us to see these ideas in action. Together, Fatima and Leylo read meaning in each other's bodies as they worked to compose shapes and letters with

#### Discussion

In this study we used the Visual Learning Analysis process to examine closely photographs from a Reggio Emiliainspired preschool classroom. Social emotional and embodied engagement were evident in all photographs, including these examples. Also resonant across the photos was Shauntá's value of children as capable of reflection and of making choices about materials and learning spaces. Given that Shauntá considered the physical classroom environment a third teacher, children explored and used materials (the documentation board and drinking straws) according to their needs and according to their own timeframes. Images suggested children's authentic social relationships and capabilities for extended periods of attention, including weeks of study about grocery stores in the first example, and more than an hour of focused composition with straws in the second. We saw body poems whose meanings could be read by the children's teacher, the teacher's coach, and interested researchers.

Putting a focus on what was in these photographs also called our attention to what is missing in them. In Shauntá's classroom, like in other Excellence Academy learning spaces, teachers do not regulate time or bodies. Children are not told where to "work," in what activities to engage, or for how long. They do not hold their mouths in bubbles and hands in fish tails (as is a common practice in pre-K and primary US classrooms to keep children's mouth quiet and hands still, especially when walking in a hallway). Their bodies are not managed in still lines or rotated through center activities. Further, the photographs in Figs. 2 and 3 reminded us that the children were not getting ready to learn, but already doing so. By extension, we learned that the VLA process extended digital photographs into visual texts that offered far more information than common tools used to assess the languages of social emotional and embodied learning, such as verbocentric checklists. As researchers and practitioners, the VLA achieved its purpose as a means to deepen our understandings of learning as social emotional and embodied. This study illustrated to us the potential of the VLA process for documenting and reflecting on the "hundred languages" of children's learning. Educators' understanding of these languages learning is not only timely, it is critical to advancing understanding of 21st century learning.

#### Recommendations

We offer the VLA as a useful tool for teachers and coaches, as well as researchers, to see more in photographs of children engaged in classroom activity. The VLA affords researchers who are increasingly interested in the role of emotion and embodiment in young children's learning (Enriquez 2015; Lysaker 2019; Whitmore and Chisholm, in press) opportunities to zoom in and notice the details of children's learning and early childhood teaching practices. The process generates the multiple meanings in digital photographs to advance understanding about a variety of educational issues in early childhood through adult education. In future research, it would be informative to invite children into a participatory research process (Harcourt et al. 2011) to understand their perspectives on adults' analyses of photographs and the roles of social emotional and embodied engagement on their learning.

For practitioners, the VLA supports attention to details that might otherwise be missed in the flurry of busy classrooms and active children. Reggio-inspired and other teachers take many photographs but are often uncertain about what to make of them. They wonder what exactly they are supposed to do to move photography practices into meaningful documentation. Because "you can really dig deeper into the moment," as Jennifer noted, an advantageous attribute of the VLA process is how it renders pedagogical values visible. In this study, Shauntá recognized growth in her practice as a Reggio-inspired educator and validated what she described as a "journey" of learning and changing. From her position as coach, Jennifer noted the value of using the VLA with teachers who are earlier on the journey, as well, to generate directions for future growth.

Finally, our work suggests that the VLA process can support early childhood teachers' professional development. As Jennifer acknowledged, it is "a really valuable experience for teachers to do together" because it invites critical conversations about practice. Teams of educators-practitioner-coach partners, communities of practice, or teacher research study groups-working together could build from the examples from this study by thinking about the image of the child or the environment as third teacher. Additional questions could focus on children's multiple ways of knowing (others of the hundred languages), power dynamics between adults and children, or manifestations of gender in the classroom. The VLA provides a means to pause, focus, zoom in, and contemplate together, about all of these issues of importance to educators of young children, and a myriad of other possibilities.

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#### **Compliance with Ethical Standards**

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

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