International Journal of Education & the Arts

http://www.ijea.org/ **ISSN: 1529-8094**

Volume 21 Number 17 **June 11, 2020**

Tagging Tabletops: How Children's Drawings on School Furniture Offer Insight into Their Learning

David Rufo
Cazenovia College, USA

Citation: Rufo, D. (2020). Tagging tabletops: How children's drawings on school furniture offer insight into their learning. *International Journal of Education & the Arts*, *21*(17). Retrieved from http://doi.org/10.26209/ijea21n17.

Abstract

In the spring of 2011, a teacher allowed his fourth and fifth grade students to draw and write on their classroom tables. What began as a few names eventually turned into a series of frenetic marks that completely covered the tabletops. Over the course of two years, new groups of students brought with them another cycle of marking that evolved in the form of notations, designs, and even carvings. The teacher documented this process over the years collecting data in the form of digital photographs, video clips, email communiqués, and teacher journal entries. This paper presents an analysis of the data, a discussion on the effects of allowing general elementary classroom students a significant degree of creative agency, and the pedagogical impacts of that agency.

The Carving

On a crisp April morning, as the students were finishing up their classwork and getting ready to transition to lunch, I watched as one of my fourth graders held a pair of scissors in a clenched fist and carved into the wooden surface of a table. Then, with two quick strokes of her hand, she swept away the shavings to reveal the word "Hi." She was not chastised for her actions, nor did she attempt to hide what she had done. This was the first time I observed a student conspicuously carve into a classroom table. Yet, by the spring of 2013, I was not surprised to see this type of creative messaging occur in my classroom. Over the years my classroom had become a place where students were allowed to engage in self-initiated creative actions and had the agency to openly display their self-initiated creativity. A by-product of this agency emerged in the form of my students imprinting their personal aesthetic on our classroom environment.

Research Questions and Methodology

In this narrative, I will share how a result of that imprinting manifested itself in the form of children marking, and eventually carving into, our classroom tables. I will then analyze visual and textual data collected during that time period to respond to the questions:

1. What types of marks did my students make on the tabletops when they were allowed significant creative agency?
2. What were the pedagogic conditions that enabled my students to engage in creative agency?
3. What do the tabletop markings and their production reveal about the way children learn?

The visual data for this study is in the form of photographs and video recordings I took of my students' creative processes and products. The textual data is composed of my personal journal entries as a teacher, email communiqués with my teaching partner, and previously written narratives about my experiences teaching children in the third, fourth, and fifth grades.

I became interested in the self-initiated creativity of children soon after starting my first job as a general elementary classroom teacher in 1995. From time to time, students would give me samples of their work in the form of small paintings or drawings. Within a few years I started using a digital camera to record the creativity of my students. Since digital photography was relatively new and caused a great deal of excitement, I had to be careful to use it in a way that would not be disruptive to their learning.

By 2009 I began taking photographs using an iPhone and soon the ubiquitousness of digital technology made the documentation of my students' creative work much less of a distraction. When I noticed students engaged in self-initiated artmaking such as drawing a sketch on a piece of scrap paper or fashioning a small object from thumbtacks and bits of erasers, I would ask permission to photograph their work. Occasionally a student would bring me sample of their work and ask if I wanted to take a picture of it. Of course, I refrained from documenting any work my students wanted to keep private. However, this only happened on rare occasions as when a student did drawings in a personal journal or diary.

These forms of data collection were part of my everyday pedagogical practice and were initially used to reflect on and inform my teaching practices. The textual data captured my daily impressions and provided a chronological account of events. The visual data helped to facilitate my memory and supply a measure of objectivity to my subjective recall.

The research questions for this study emerged from the pedagogical methods, theories, and philosophies I have considered and investigated throughout my career as an educator. I composed the questions for this study when I decided to revisit and reexamine the practice of my students marking the tabletops which began in early 2011. As a teacher-researcher, I used narrative and action research methodologies to study the self-initiated creativity of the students in my classroom. These approaches provided me ways to describe, examine, and analyze my teaching practices (Herr & Anderson, 2005). For the researcher, storytelling offers a method of inquiry and reflection (Anderson, Herr & Nihlen, 2007; Bresler, 1993) and composing a narrative gave me the opportunity to revisit the events that surrounded this study, make sense of my experiences, and use it as an interpretive frame to become a more effective educator (Anderson & Herr, 1999; Bullough & Pinnegar, 2001).

During my time as an elementary classroom teacher, using my own classroom as a research site gave me an "insider perspective" (Sullivan, 1996, p. 220) yet at the same time I had to be cognizant of the personal biases and subjectivities that accompanying all forms of self-study as well as the effect my alternative approach to education might have had on others at the research site. As an artist as well as an educator, I was interested in exploring the various ways that creativity can become part of the curriculum. I was also intrigued by the conceptualization of creativity itself, what it meant to be creative, and the extent to which engaging in self-initiated creative actions necessitates a deep level of personal agency. My teaching partner and I desired to give our students increasing amounts of creative agency in an attempt to establish our version of a child-centered classroom. The manifestation of this agency was in the form of student choice and democratic classroom practices where the students were invited to take part in determining classroom protocol and encouraged to voice their opinions and ideas concerning the curriculum.

We believed allowing students agency offered them the autonomy to "experience oneself as the origin of decisions rather than as the victim of things outside one's control" (Kohn, 1996, p. 9). However, some viewed our unconventional teaching practices as disruptive. For example, one faculty member became upset when, upon hearing of our classroom practices, her students also began to petition for the "opportunity to vote regarding instructional decisions" (personal communication, June 14, 2013). The principal later recalled, "the impression was that you were breaking away from the beloved traditions of the school" (personal communication, July 15, 2015). This reaction is not surprising since the same agency that empowers students also disrupts the hierarchical practices embedded in traditional schooling customs and conventions (de Souza Fleith, 2000; Pennisi, 2006; Wagner-Ott, 2002).

Organization and Coding of the Data Set

The data set was comprised of 407 pieces of digitized videoclips, photographs, and textual data. During the first coding cycle, the data was organized chronologically in digital folders beginning in the fall of 2008 and ending in the spring of 2013. Within each folder, subfolders were organized by month and day. In addition to the chronological time period, the data included supplementary descriptors to signify specific data categories such as emails to parents, math lessons, etc. Although the first tabletop drawing was not created until March 10, 2011, examining data from three years prior provided a historical context of the creative and pedagogical activities that took place in our classroom leading up to the advent of the tabletop drawings.

Next, common attributes embedded in various pieces of data were identified and subsequent coding cycles were employed to further categorize, filter, and organize the information (Saldana, 2013). This process facilitated the identification of themes salient to the research topic and served as a visual system and "scientific codification process to 'interrogate' the data" (Sagor, 1992, p. 49).

Theoretical Lens

The theoretical lens for this study incorporates aspects of Csikszentmihalyi's Systems Theory of Creativity (1997) and Brent Wilson's Three Pedagogical Sites (Wilson, 2005).

Csikszentmihalyi's Systems Theory of Creativity (1997) consists of the interaction between the individual, the domain, and the field. In this model, the individual brings a novel idea or product into the domain. The field is a group of experts who act as gatekeepers to the domain where they evaluate an individual's novel idea or product as creative and decide whether or not to allow it into the domain. My classroom became a microcosm of Csikszentmihalyi's model of creative activity. In our classroom, the students were the individuals and the domain

was our classroom culture collectively generated by the teachers and the students. However, in the variation practiced within my classroom, the level of student agency generated a field that, depending on the creative context, could consist of the student collective, groups of students, and/or each individual student. Therefore, any student's creative process or product was automatically recognized as a novel form of creativity to be included in the domain.

Our classroom culture privileged student-generated ideas and concepts that were presented in visually stimulating ways. Rules and practices were developed that enabled students to engage in self-initiated creative actions such as drawing on the tabletops. Self-directed learning and the agency to self-navigate and interact permitted the rules and practices of our classroom's visual culture to seamlessly and continuously be transmitted between individual students. Students desiring positive feedback from the classroom community as well as personal aesthetic stimulation, internalized the rules and practices, which led them to engage in additional self-initiated creative actions. Creative agency allowed students to devise creative processes and products that added novel variations to the visual culture of our classroom. Since the field was constituted as a democratic classroom environment, and could be made up of the student collective, groups of students, or an individual student, all creative processes and products became part of the domain.

In his research literature on creativity, Brent Wilson talks about three primary visual cultural sites. The first pedagogical site is located outside of the classroom where children "construct their own visual cultural texts" (Wilson, 2005, p. 18) and consume those made by others. The second pedagogical site is inside the classroom where the teacher directs the learning, and the third pedagogical site is where a "transactional pedagogy" (p. 19) takes place. This third site is where the visual cultural interests of the teacher and the students are equally valued and honored. James Rolling engages with Wilson's theories of cultural sites in his article, "Sites of Contention and Critical Thinking in the Elementary Art Classroom: A Political Cartooning Project." James Rolling (2008) asks, "How does the young learner exercise agency if the reigning conception of children does not afford opportunities for them to demonstrate their agency in schooling practices?" (p. 9). In response to the query, Rolling (2008) looks to Wilson's third pedagogical site where teachers and students act as "partners in pedagogy" (p. 9). Wilson's third pedagogical site reflects how the field in our classroom community acted as gatekeepers to the domain, but where all members had the ability to open the gate. Wilson envisioned situations in which all members of an educational environment may present their visual cultural artifacts for others to interpret and critique. What happened in our classroom during this study operationalized Wilson's third site.

Self-Initiated Creativity

In my research, self-initiated creativity is defined as creative actions in which children take

part of their own volition and in a place and time of their own choosing. Such creative actions are not directed by an administrator, teacher, staff or part of a school sanctioned project or event (Rufo, 2016). In our classroom there were two rules for students who wanted to engage in self-initiated creative acts:

1. The act had to be safe.
2. The act should not interfere with the learning of the person doing the creating or the learning of others.

However, the self-initiated creativity of children does not reflect conventional classroom creativity (Rufo, 2014) and often transgresses the visual codes and conventions found in classrooms. The self-initiated creative processes and projects of children can appear messy and unfinished especially in classroom environments where student artwork is expected to be socially acceptable finished products that are realistically rendered and neatly presented (Anning, 1997; Bresler, 1999; Haanstra, 2010; Hamblen, 2002; LaJevic, 2013; Matthews, 2003). The optics particular to the self-initiated creativity of children is anathema to the visual aesthetic many have come to expect from public school classrooms where teachers decide how to set up the classroom, arrange the furniture, and display student work (Anderson, 2010). Conversely, in my classroom, children had a vital role in designing the classroom space and deciding on the protocol that determined how they interacted with various elements, such as tables, within that space. Therefore, the story of how my students enacted their creativity is a "conflicting" story in that it collided with the "dominant stories of schools" (Clandinin, 2016, p. 66). Understandably, most colleagues with whom I worked would not have considered a child carving into a table creative nor would they have considered it safe. They most certainly thought self-initiated creativity was disruptive to learning. Nevertheless, in our classroom, if the student in control of the action considered the action creative and safe, then it was deemed creative and safe. Of course, the classroom teachers kept a close watch to ensure safety. Finally, the carving did not interfere with learning because, by that time, my students had grown accustomed to learning in a classroom where they were granted an extreme level of personal creative license and therefore the table carving did not cause undue attention.

Allowing students agency in all aspects of their schooling experience was a fundamental principle of my teaching philosophy. The proliferation of student-initiated creativity was one of the main by-products of that ideology. Other faculty and staff at our school did not share this philosophy, at least not to the degree that my teaching partner and I allowed it to evolve. Children in other classrooms who had the audacity to draw or write on furniture were often required to spend their recess time scrubbing the surfaces to expunge their marks. A carving made with a scissor might have been grounds for suspension.

Backstory

I did not always allow my students such an exceptional level of creative agency. It was something that developed gradually, over the course of many years. Soon after starting my first teaching job in 1995 as a third and fourth grade multi-age general elementary classroom teacher, I became fascinated with how children went about their self-initiated creative actions in schools, particularly outside of traditionally sanctioned creative spaces such as the art room or playground. It was inspiring to observe the level of resiliency children exhibited with regard to their creative actions, especially when enacted in highly restrictive environments such as elementary classrooms where, for the most part, students are made to follow fixed schedules, attend to teacher-directed lessons, and learn from prepackaged curricula. Because schools require children to speak and move according to specific rules of conduct, many students assume the role of "passive bodies waiting for instruction" (Andrews, 2005, p. 39).

As an artist who went to art school before becoming an educator, I am interested in the pictorial as well as the pedagogical aspects of the creativity of children. In my previous research, I reflected on the creative resiliency of children in highly controlled environments such as schools:

> when children do not have agency, their self-initiated creative spaces are usually small and often temporary: a locker, cubby, inside of a desk or the seat of a chair. Many times, children carried their creation with them for fear of having it taken away. In these instances, the creative environment became a pencil box, pocket, or even a closed fist. The items were usually made from the detritus children acquired from classroom floors, while walking through the hallways or when they had an opportunity to surreptitiously pilfer from a supply cabinet or teacher desk. (Rufo, 2016, p. 51)

It was this sense of fear that struck me most. I found it absurd that children were afraid to engage in self-initiated creative actions while in school. I came to refer to these self-initiated creations as subterranean objects because of the way the children would go to great lengths to protect their creations and hide them from the adults with whom they interacted in school spaces. Some of their subterranean objects were temporal, where the process held more value than the product. Others were in constant flux, as the children continually added and detracted elements perpetually altering, modifying, and refining the object according to their impulses and whims. I questioned why schooling environments left little, if any, room for children to bring their own creative ideas, actions, and processes to the learning environment. I began to wonder, "What would happen if these items were valued, encouraged, and shared?" (Rufo, 2011, p. 20).

A key moment in my development as an educator happened in the fall of 2006 when a teacher

named Greg Sommer joined the faculty. One day Greg looked at my teacher desk and asked why I needed it. At first, I was taken aback by the question but then understood his intent as he began to point out the many aspects of my desk that interfered with our conception of a learner-centered teaching philosophy:

> He mentioned the size of the desk and how much room it took up. He asked me to consider the placement of the desk at the front of the classroom and the power structure it symbolized. As the students entered the classroom we watched how it interrupted the flow of bodies, as they were required to navigate around it. (Rufo, 2016, p. 15)

After our conversation, I began to see my desk as a physical impediment and a monolith symbolic of the unequal hierarchy within the classroom:

> My desk was much larger than the student desks. I could decide where to place it in the classroom but the students had to remain in predetermined seating arrangements. I could lock the drawers of my desk but the students had no way to secure their belongings…mine was filled with personal effects and mementos but the students were not allowed to personalize their desks…. I had jurisdiction over the classroom both physically and psychologically. (Rufo, 2016, pp. 17-18)

By 2008, Greg and I were working together as a teaching team. We decided that our classroom would be a democratic space where the children would have a significant degree of self-governance, ownership of their learning, and control over the physical classroom environment. I had disposed of my teacher desk and Greg and I exchanged the student desks for plastic folding banquet tables so our classroom could be easily rearranged for different activities and adapt to the needs of our students on a daily basis (Rufo, 2012). One observer described our classroom as a place where "spontaneity, flexibility, and freedom" (Rolling 2013, p. 163) became part of the daily learning experience.

How Drawing on the Tabletops Began

In late February of 2011, a student informed me that a classmate had surreptitiously drawn on one of the tables. I nodded and said "Okay." Surprised by my response or lack thereof, she added, "Aren't you going to do something about it?" I asked her what she thought I should do about it. She said that the student who made the mark should be punished for doing so. I asked her why she thought the student should be punished for drawing on a table. As our exchange continued, other children in the classroom began to overhear and add their thoughts and opinions to the discussion. Soon, every child in the classroom was talking about drawing on the tabletop.

When the students and I entered into discussions involving school etiquette, they invariably led to deliberations about presumed customs and conventions within educational environments. In our school, as with most, there was the expectation that students would not be allowed to draw on school furniture. As an educator interested in critical pedagogy, I guided such conversations to help my students unpack embedded ideological practices and examine them through a variety of lenses and alternative perspectives. Ultimately, our talks became a form of critical analysis where the children examined how their position as students in our school impacted a large portion of their lived experiences. I felt it was important to empower students via critical engagement especially "within tightly controlled environments" (Riley, 2015, p. 417) such as schools. In our classroom, what began as a simple question often led to a debate and a subsequent vote to determine or amend our classroom rules of conduct.

This is what happened as we discussed drawing on the tabletop. An extended classroom debate ensued by the end of which it was voted and decided that drawing on the tables by students would be allowed. The next step was for our class to decide on the rules that would govern the act of drawing on tables. We decided that drawing on the tables should be allowed as long as:

1. The act was not a distraction to learning.
2. Permanent markers were used so that the drawings would not smudge or smear onto clothing.
3. Students did not write the names of, or make reference to, other students on the tabletops without prior permission.

Desktop Drawings as Graffiti

After our class passed the resolution allowing students to draw on the tables, I became apprehensive as I considered how it would look to other faculty, parents, and the administration. My fears were realized two years later when the comment "a culture of respect for property is lacking…tables have been routinely written upon and defaced" appeared in an administrative report reprimanding our classroom practices (Rufo, 2014). Although a child writing a name or drawing a doodle on a school desk is, in and of itself, an innocuous act, this was not surprising because drawings on desktops are considered to be a form of vandalism (Halsey & Young, 2002), associated with graffiti (Martinez, 1993), and also tagging which refers to a "graffitist's signature or nickname" (Lapya, 2003, p.12). Tagging in particular has negative connotations because of its connection to gang members who use it as a "strategy to announce their power and territory" (Lapya, 2003, p.12). Yet, graffiti has existed for hundreds of years (Lapyai, 2003; Lindsay, 1966) and children have been marking school desks since at least the late 19th century (Deiulio, 1973). I would argue that marking public spaces, such as drawing on desktops, is a part of the human experience and could provide significant data on

children and pedagogy.

In a 1973 study of desktop graffiti, Anthony Deiulio suggested that markings found on desktops could provide a vast amount of data and offer insights on "student sentiment toward curricular or instructional activity" (p. 103). Deiulio found that the desktop markings in his study communicated negative feelings toward schooling such as "boredom, confusion, anxiety, hostility, fear of failure, and lack of purpose" but also revealed the desire for "love, friendship, acceptance, accomplishment [and] purpose" (p. 103). Interestingly, in my classroom, before the children were allowed to openly draw and tag the tabletops, the markings often included words and images that reflected the negative aspects of Deiulio's findings. After the children were allowed to draw on the tabletops, I found no evidence of negative messaging. This observation suggests that there are positive outcomes to allowing students creative agency and ownership of the classroom space, and conversely, negative outcomes when creative agency is suppressed as in more traditional schooling environments such as the one in Deiulio's study.

The Types of Marks My Students Made on the Tabletops and Their Significance

In my classroom, the initial tabletop markings were created during an indoor recess time. These drawings were fairly unexceptional, made up of mostly names and a few small cartoon figures and illustrations. However, by late March of 2011, there was a new development in the table drawings. Four out of the seven tables had drawings that could be described as "all-over" markings, a term to denote the compositional quality attributed to American abstract expressionist painters such as Jackson Pollock whose work resembled an all-over method of working "so that there is no single focus of attention" (Clarke, 1993, p. 356). Previously, students attended to the table drawings much in the same way as when they drew on 8½ by 11 inch sheets of paper with their drawings confined within a tight frame as if invisible partitions were inscribed on the surfaces of the tables. Suddenly, larger markings broke free of the boundaries as smaller drawings continued to fill the remaining unmarked areas. These new all-over works were largely graphic abstractions, one in the shape of long wavy lines, another resembling a five-foot-long lightning bolt, the third a massive trapezoid, and the fourth a row of three large ovoid shapes that ran the six-foot length of the table.

I found this development to be significant because it signaled a new type of social aspect to the students' tabletop mark making. Instead of each student drawing within a fixed region, the tabletops became communal drawing surfaces. This may have been partially due to the fact that our students were not assigned seats. Each day they could choose to sit wherever they pleased. At the end of the day, the lightweight resin tables were easily folded and stored away. The next morning, students or teachers set the tables back up arranging them in a manner they felt best suited the upcoming lesson or activity.

In early April of 2011, I noticed another significant development. Students began drawing on the tables during the direct instruction portion of a math lesson. Here, the creative action appeared similar to doodling, with students quietly making marks, drawing images, and crafting designs as they listened to the information being presented. However, the simplicity of a doodle can often belie the deep connections between the student and what appears to be an unexceptional, spontaneous mark-making action (Longmore, 2012). It has been posited that the act of doodling helps "make visible that which might remain ethereal" (Carrol, 1991, p. 34). Furthermore, it has been shown that doodling may provide a "way to regulate mood" and "evoke a sense of pleasure" (Kaimal, et al., 2017, p. 91). Doodling on the tabletops during math class indicated a new level of comfort with, and integration of, the table marking activity as it merged with the students' academic learning. The self-initiated creativity of my students and the learning processes became harmonious, one complementing the other. By the end of the 2010-2011 school year, names and dates, cartoon faces and figures, quips, and humorous declarations, appeared across the surfaces of the tables.

By the following September, marking the tabletops became commonplace and was no longer considered a novelty. When I asked one student why she and a group of friends were drawing on the tables she simply said, "Because it's fun." On the face of it, this statement could be taken as a perfunctory response. However, her answer reflected something I have noticed since I began teaching: children learn best when they express that they are having fun. When students are having fun, "they value and enjoy the process of learning itself" (Packer, 2006, p. 329) and as a result become intrinsically motivated to engage more deeply with their learning (Lee, Cheung, & Chen, 2005). For instance, one year the students decided to turn the first 20 minutes of our math class, where we reviewed homework and introduced new material, into an event that resembled a television game show. For this production I acquired a microphone and amplifier, and then set up a closed-circuit system that connected a video camera to a television monitor. Each day, students took turns being the host, cameraperson, and sound effects engineer as they lead the class through a review of previous lessons and the introduction of new material. This fun and entertaining approach produced creative "entry points" (Vasile, 2011, p. 78) through which the students were able to access and enhanced their understanding of mathematical concepts by playfully mimicking the genre of television game shows.

Over the course of the 2011-2012 school year, the tabletops became increasingly crowded with marks so that by June, the surfaces were almost completely covered with an array of drawings, designs, diagrams, patterns, and scribbles. The congested surface of each table resembled a single, large abstract image. Only upon close examination were the individual markings discernable as they meandered around and over, and in some cases obliterated, previous imagery. There no longer was an evident orientation to the drawings or a particular

image that garnered more attention than others. Instead, the viewer's gaze was held momentarily by the uniqueness of each mark, before resuming its journey across the tabletop.

The tables had become massive communal tablets where the disparate ideas of each child coalesced into a visual form that bore witness to the transformation of creativity from an individual endeavor to an ongoing, interactive, social event. I found this significant because children are trained through their schooling, and in particular through the increasing demands of high-stakes testing, to frame their educational experiences as an individualistic and competitive exploit rather than a shared experience that edifies the collective (Donlevy, 2000; Klenowski & Carter, 2016).

That summer, Greg and I salvaged old butcher-block style tables that the art department had thrown out and added them to our table collection. We affixed furniture sliders to the legs of each table so that both teachers and students could easily move the heavy tables when they wanted to rearrange the space. Soon after the students arrived back in the classroom for the 2012-2013 school year, marks began appearing on the wooden tables, which ushered in yet another new advent of mark making. The wide tops of the wooden tables inspired the children to use them as game surfaces. Over the winter and into the spring they drew game diagrams and wrote instructions on top of and around the existing drawings and markings. Sometimes the children would push two of the large wooden tables together to play their own version of a table tennis game adding a "series of marks, lines and directions…in bright red permanent marker signifying various boundaries and game rules" (Rufo, 2016, p. 279).

It was at this time that the student decided to make the carving mentioned at the beginning of this narrative. With the carving, the tabletop markings had come full circle, spiraled into a new dimension, and embarked on their next iteration. It took a little over two years for the tables to transform from places where children were simply required to do their schoolwork and attend to teacher-directed lessons, to places where they could freely imprint their feelings, express their ideas, and establish a synchronicity with the learning process. The table markings made manifest the students' creative agency.

The Three Pedagogic Conditions that Enabled My Students to Engage in Creative Agency: Choice, Accessibility, and Ownership

Schools "demand conforming behaviors" (Sisk, 2019, p.134) and emphasize "following directions" and "doing work according to external standards" (Okagaki & Sternberg, 1993, p. 37). Foucault conceptualized schools as "institutional sites of reproduction" that caused children to "internalize norms in unconscious ways" (Higgins, 2010, p. 40). Conversely, giving students choice and ownership fosters intrinsic motivation and engenders creative learning (Cordova & Lepper, 1996; Csikszentmihalyi, 1997; Florida, 2012). Before allowing

my students significant agency, my efforts to have the children engage in creative modes of learning usually resulted in cliché or formulaic artworks. The tabletop markings on the other hand, were bold and unconventional renderings that continually morphed into novel and surprising manifestations. I believe this was due to three pedagogic conditions: choice, accessibility, and ownership.

The students had choice in that they were not compelled to draw on the tables since the practice of marking the tables was not part of any preplanned curricular activity or scope and sequence. At the same time, the tables were readily accessible to the students, offering a surface for creative engagement any time the students wanted to draw on them. The table marking process afforded the students a sense of ownership of the classroom space and their learning within that space. Since the students created the activity, established the protocol surrounding the activity, and decided when and how to take part in the activity, it became wholly theirs, yielding visual imagery that went well beyond what I had previously seen in my students' creative production.

In the story of the tabletop drawings, one can see how the three pedagogic conditions of choice, accessibility, and ownership led to new types of creative engagements, explorations, and expressions. Drawings by a single student, once hindered by fictitious frames, spread past boundaries to probe, become part of, and enliven the work of another student. Drawings and designs were given new visual meaning by virtue of their proximity to neighboring work. When my students' creativity was constrained by teacher-directed projects and procedures it yielded work that was homogenous. However, once my students' creative expressions were manifestations of their own agency, the works began to reflect qualities of contemporary art as they challenged expectations (Arnold, 2004), opposed conventions, altered perceptions, and provoked thought (Barrett, 2008).

What do the Tabletop Markings and Their Production Reveal About the Way Children Learn?

Although the photographs, video recordings, and textual information that makes up the data set for this study was not originally collected with the express intent of addressing the topic of learning, an examination of the data does reflect the findings in the research literature regarding the relationships between creative mark-making and learning. For example, the act of drawing on the tabletops, especially during teacher-directed lessons, is similar to the act of doodling. Many believe doodling is simply the "absentminded scribbles that people engage in when they are bored or not fully engaged in a primary task" (Burger, Lee, & Rust, 2018, p. 1). However, there is research that disputes this point of view, finding instead that doodling improves memory, concentration, and cognitive performance (Andrade, 2009; Burger, Lee, & Rust, 2018; Tadayon & Afhami, 2017). Additionally, of the seven perceptual learning styles

cited by Adebayo, Mortimer, Marcis, and Little (2015), two modalities, haptic and kinesthetic, may be achieved through doodling or actions such as drawing on the tabletops. The physical movement in these activities stimulates the release of chemicals in the brain that help children "become more alert and ready to learn" (Jensen, 2000, p. 29). Interestingly, I recall how the haptic and kinesthetic learners in my classroom often chose to draw on the tabletops while listening to me present new material, conduct classroom discussions, or review homework assignments. In some of the video recordings, one can watch as these students, who at first appear to be completely lost in their tabletop drawings, suddenly respond to a question or voluntarily add to the class discussion.

The research literature also highlights the therapeutic effects of drawing and its use with children who suffer from trauma, depression, and anxiety (Altay, Kilicarslan-Toruner, & Sari, 2017; Edmonston, 2015; Ugurlu, Akca, & Acarturk, 2016). Similarly, I can recall how the act of drawing on the tabletops appeared to ease the apprehensiveness of my students. This was particularly evident during subjects such as math where students were required to master prior skills and concepts before learning new content (Rufo, 2017).

Perhaps most significantly, the table top drawings provided my students with a sense of empowerment in their learning. It has been found that creative expression not only "deepens understanding" but also leads to "self-empowerment" (Brown & Bousalis, 2017, p. 49) and therefore greater confidence in, and ownership of, learning. Additionally, the expressive arts act as a "medium for communication" (Wikstrom, 2005, p. 480). This heightened sense of confidence helped all of my students but was especially beneficial to those insecure students whose newfound confidence helped them transition from visual forms of communication, via drawing on the tabletops, to social forms of communication. The students who were less likely to engage in classroom discussions at the beginning of the school year, more readily volunteered to share their thoughts and ideas as the year progressed.

Epilogue

By 2014, with the original markings fading, the tables became palimpsests reminiscent of the installations by contemporary artist Rudolf Stingel. Stingel covered gallery walls with Celotex insulation board upon which visitors were allowed to incise messages and carve markings over and over into the malleable surfaces of the panels. Similar to the way in which Stingel's work examined, challenged, and redefined the concept of a painting, my students explored, experimented with, and eventually redefined and repurposed our classroom tabletops. In a Christie's auction catalogue, Stingel's Celotex work is described as a surface upon which visitors "literally inscribed their presence" (Friedlaner, 2014, para. 1). Here, my students inscribed not only their presence but also left an abiding testimony of creative agency on student learning.

References

Adebayo, A. O., Mortimer, J. W., Marcis, J. G., & Little, P. L. (2015). The impact of student learning styles on scholastic performance. *Journal of the Academy of Business Education, 16,* 276-291.

Andrews, B. H. (2005). Art, reflection, and creativity in the classroom: The student—driven art course. *Art Education, 58*(4), 35-40.

Anderson, G. L., & Herr, K. (1999). The new paradigm wars: Is there room for rigorous practitioner knowledge in schools and universities? *Educational Researcher, 28*(5), 12-21.

Anderson, G. L., Herr, K., & Nihlen, A. S. (2007). *Studying your own school: An educator's guide to qualitative practitioner research.* Thousand Oaks, CA: Sage.

Anderson, M. (2010). *What every 4th grade teacher needs to know about setting up and running a classroom*. Turners Falls, MA: Northeast Foundation for Children.

Andrade, J. (2009). What does doodling do? *Applied Cognitive Psychology, 24,* 100-106

Anning, A. 1997. Drawing out ideas: Graphicacy and young children. *International Journal of Technology and Design Education, 7,* 219–239.

Arnold, D. (2004). *Art history: A very short introduction*. Oxford University Press.

Altay, N., Kilicarslan-Toruner, E., & Sari, C. (2017). The effect of drawing and writing technique on the anxiety level of children undergoing cancer treatment. *European Journal of Oncology Nursing*, 1-6.

Barrett, T. (2008). *Why is that art? Aesthetics and criticism of contemporary art.* New York: Oxford University Press.

Bresler, L. (1993). Teacher knowledge and scholarly discourse in the visual arts: Drawing on phenomenology, case study, and action research. *Visual Art Research, 19*(1), 30-46.

Bresler, L. (1999). The hybridization and homogenization of school art: Institutional contexts for elementary art specialists. *Visual Arts Research, 25*(2), 25-37.

Brown, S. L., & Bousalis, R. (2017). Empowering young minds through communication, creative expression, and human rights in refugee art. *Art Education, 70*(4), 48-50.

Bullough, R. V., & Pinnegar, S. (2001). Guidelines for quality in autobiographical forms of self-study research. *Educational Researcher, 30*(3), 13-21.

Burger, J., Lee, E., & Rust, A. (2018). The effects of doodling on performance in a memory task. *Sentience, 17,* 1-5.

Carrol, J.A. (1991). Drawing into meaning: A powerful writing tool. *The English Journal, 80*(6), 34-38.

Clandinin, D. J. (2016). *Engaging in narrative inquiry.* New York, NY: Routledge.

Clarke, D. (1993). The all-over image: Meaning in abstract art. *Journal of American Studies, 27*(3), 355-375.

Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology, 88,* 715-730.

Csikszentmihalyi, M. (1997). *Creativity: Flow and the psychology of discovery and invention.* New York, NY: Harper Perennial.

Deiulio, A. M. (1973). Desk top graffiti: Scratching beneath the surface. *Journal of Research & Development in Education, 7*(1), 100-104.

de Souza Fleith, D. (2000). Teacher and student perceptions of creativity in the classroom environment. *Roeper Review, 22*(3), 148-153.

Donlevy, J. (2000). The dilemma of high-stakes testing: *What is school for? International Journal of Instructional Media, 27*(4), 331-337.

Edmonston, C. (2015). The upside of cancer—A personal account of embracing life with cancer. *Complementary Therapies in Clinical Practice, 12*(4), 268–271.

Ferrell, J. (1995). Urban graffiti: Crime, control, and resistance. *Youth & Society, 27*(1), 73-92.

Florida, R. (2012). The rise of the creative class, revisited. New York, NY: Basic Books.

Friedlander, S. (2014). *Post-war and contemporary evening sale* [Exhibition catalogue]. New York, NY: Christie's.

Gadsby, J. (1995). Looking at the writing on the wall: A critical review and taxonomy of graffiti texts [website]. Retrieved from http://www.graffiti.org/faq/critical.review.html

Haanstra, F. (2010). Self-initiated art work and school art. *Jade, 29*(3), 271-282.

Halsey, M. & Young, A. (2002). The meanings of graffiti and municipal administration. *Australian & New Zealand Journal of Criminology, 35*(2), 165-186.

Hamblen, K. A. (2002). Children's contextual art knowledge: Local art and school art context comparisons. In L. Bresler & C.M. Thompson (Eds.), *The arts in children's lives: Context, culture and curriculum* (pp.15-27). Boston, MA: Kluwer Academic Press.

Herr, K., & Anderson, G. L. (2005). *The action research dissertation: A guide for students and faculty.* Thousand Oakes: SAGE Publications.

Jensen, E. (2000). *Moving with the brain in mind.* Thousand Oaks, CA; Corwin Press.

Kaimal, G., Ayaz, H., Herres, J., Dieterich-Hartwell, R., Makwana, B., Kaiser, D.H., &

Nasser, J.A. (2017). Functional near-infrared spectroscopy assessment of reward perception based on visual self-expression: Coloring, doodling, and free drawing. *The Arts in Psychotherapy, 55:* 85-92.

Klenowski, V., & Carter, M. (2016) Curriculum reform in testing and accountability contexts. In D. Wyse, L. Hayward & J. Pandya (Eds.), *The SAGE handbook of curriculum, pedagogy and assessment* (Vol. 2, pp. 790-804). London: Sage.

Kohn, A. (1996). *Beyond discipline: From compliance to community.* Alexandria, VA: ASCD.

LaJevic, L. (2013). Arts integration: What is really happening in the elementary classroom? *Journal for Learning Through the Arts, 9*(1), 1-28.

Lapyai, S. (2003). Scratching protest: A study of graffiti as communication in universities in Thailand (Doctoral Dissertation). Retrieved from https://ro.ecu.edu.au/theses/1491c

Lee, M.K.O., Cheung, C.M.K., & Chen, Z. (2005). Acceptance of internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information & Management, 42* (8), 1095–1104.

Lichtman, M. (2006). *Qualitative research in education: A user's guide.* Thousand Oaks, CA: Sage.

Lindsay, J. (1966). *The writing on the wall: An account of Pompeii in its last days*. London, England: Frederick Muller Limited.

Longmore, T. (2012). Supporting young artists as independent creators. In D.B. Jaquith & N.E. Hathaway (Eds.), *The learner-directed classroom: Developing creative thinking skills through art* (pp. 56-63). New York: Teachers College.

Matthews, J. (2003). *Drawing and painting: Children and visual representation.* London, UK: Paul Chapman.

Okagaki, L., & Sternberg, R. J. (1993). Parental beliefs and children's school performance. *Child Development, 64*, 36-56.

Packer, J. (2006). Learning for fun: The unique contribution of educational leisure experiences. C*urator: The Museum Journal* 49(3), 329-344.

Pennisi, A. C. (2006). Voices of women: Telling the truth through art making. *The Journal of Social Theory in Art Education, 26,* 85-104.

Rolling, J. H. (2008). Sites of contention and critical thinking in the elementary art classroom: A political cartooning project. *International Journal of Education &the Arts, 9*(4).

Rolling, J. H. (2013). *Swarm intelligence: What nature teaches us about shaping creative leadership*. New York, NY: Palgrave Macmillan.

Rufo, D. (2011). Allowing artistic agency in the elementary classroom. *Art Education, 64*(3), 18-23.

Rufo, D. (2012, August). Drawing on tabletops. http://tajaltspace.com/drawing-on-tabletops/.

Rufo, D. (2014). An arts-based classroom confronts educational metanarratives: Grand narratives, local stories and a classroom teacher's story. *Journal of Social Theory in Art Education, 34,* 18-30.

Rufo, D. (2016). *Self-initiated creativity in the elementary classroom* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10165547)

Rufo, D. (2017). Math hater: How one child overcame her math anxiety through self-administered art therapy. *Art Education*, *70*(5), 6-10.

Sagor, R. (1992). *How to conduct collaborative action research.* Alexandria, VA: Association for Supervision and Curriculum Development.

Saldana, J. (2013). *The coding manual for qualitative researchers.* Thousand Oaks, CA: SAGE.

Sisk, D.A. (2019). *The SAGE handbook of gifted and talented education.* Los Angeles, CA: SAGE Publications.

Sullivan, G. (1996) Critical interpretive inquiry: A qualitative study of five contemporary artists' ways of seeing. *Studies in Art Education, 37*(4), 210-225.

Tadayon, M., & Afhami, R. (2017). Doodling effects on junior high school students' learning. *International Journal of Education & the Arts, 36*(1), 118-125.

Ugurlu, N., Akca, L., & Acarturk, C. (2016). An art therapy intervention for symptoms of post-traumatic stress, depression and anxiety among Syrian refugee children. *Vulnerable Children and Youth Studies, 11,* 89–102.

Varnedoe, K & Serra, R. (1995). Cy Twombly: An artist's artist. RES: Anthropology and Aesthetics, 28, 163-179.

Vasile, C. (2011). Entry points, interests and attitudes: An integrative approach of learning. *Procedia - Social and Behavioral Sciences, 11,* 79-81.

Wagner-Ott, A. (2002). Analysis of gender identity through doll and action figure politics in art education. *Studies in Art Education, 43*(3), 246-263.

Wikstrom, B. M. (2005). Communicating via expressive arts: The natural medium of self-expression for hospitalized children. *Pediatric Nursing, 31*(6), 480-506.

Wilson, B. (2005). More lessons from the superheroes of J.C. Holz: The visual culture of childhood and the third pedagogical site. *Art Education, 59*(6), 18-34.

About the Author

David Rufo is an Assistant Professor of Education in the Division of Behavioral and Social Sciences at Cazenovia College in upstate New York. Previously, Dr. Rufo was a Clinical Assistant Professor at Fordham University's Graduate School of Education at Lincoln Center in New York City. Additionally, Dr. Rufo has two decades of experience as a general elementary classroom teacher and an instructor in the Department of Art Education at Syracuse University. Dr. Rufo's research interests include: Teacher Education, Curriculum Studies, Interdisciplinary Learning, STEAM Education, Qualitative Research, Classroom Action Research, Narrative Inquiry, Elementary Education, Critical Pedagogy, Child-Centered Education, Hands-On Mathematical Investigations, Democratic Classrooms, Visual Culture, The Self-Initiated Creativity of Children, Contemporary Art, Art History, and Art Education. David has published articles in a variety of national and international peer-reviewed journals. In addition to being an educator, David is also a visual artist. His writings may be found at cazenovia.academia.edu/DavidRufo and his artwork at davidjohnrufo.com.

International Journal of Education & the Arts

http://IJEA.org ISSN: 1529-8094