

Art Education: The Gift That Keeps On Giving

By [Adam Zucker](#), January 12, 2021



Vivien Collens, *Fröbel's Gifts: Blue Circuit*, 2018. Courtesy of the [artist](#).

Modern art schools have an extraordinary origin in early childhood education; most notably, the pedagogical breakthroughs of a 19th century German educator named Friedrich Fröbel. In the book, [Inventing Kindergarten](#), author and kindergarten historian, Norman Brosterman (1997), calls kindergarten “the seed pearl of the modern era.” Elizabeth Peabody, a transcendentalist and educator, responsible for spreading Fröbel’s pedagogic creed and practice to English language schools in the United States, stated that “Fröbel’s kindergarten is a primary art school, for it employs the prestigious but originally blind activity and easily trained hand of childhood in

intelligent production of things within the childish sphere of affection and fancy” (Peabody, 1870 qtd in Logan, 1950).

Fröbel’s foundation of kindergarten and his introduction of guided learning manipulatives, called [Fröbel Gifts](#), has had a lasting impact on young children and professional artists alike, from the 19th century to the present ([please refer to previous blog posts about Fröbel’s pedagogy here](#)). Since Fröbel’s inaugural kindergarten and Gifts debuted in 1837, students have been learning mathematical, scientific and aesthetic concepts through hands-on work with physical objects. As young students explore materials they develop profound and pragmatic ways of thinking about relational concepts, which are both abstract and concrete in nature. In addition to utilizing the Gifts, Fröbel’s pedagogical methods include dancing, singing and growing plants in outdoor gardens. The crux of kindergarten is to nurture a child’s awareness of spatial, social and emotional relationships that exist within the world around them. As author Lawrence Weschler (2014) reflects, “kindergartners were the *teachers*—the gardeners of children—and the gardening took the form of guided free play: no tests, no drills, no grades, not even any reading, ‘riting, or ‘rithmetic. Just patterns and patterning: a sequential exposition of and exposure to form and the formful.” The impact of Fröbel Gifts and playful educational activities (which he called [‘Occupations’](#)) on children’s overall development and lifelong learning is a testament to art’s central role within educational curricula.

In an art-centered educational structure, the benefits of Fröbel Gifts and other embodied learning activities don’t expire with age. The artful concepts of early childhood education shaped the pedagogical philosophies of seminal art educators such as Walter Gropius and Josef Albers, and set the tone for modern and contemporary art school models.

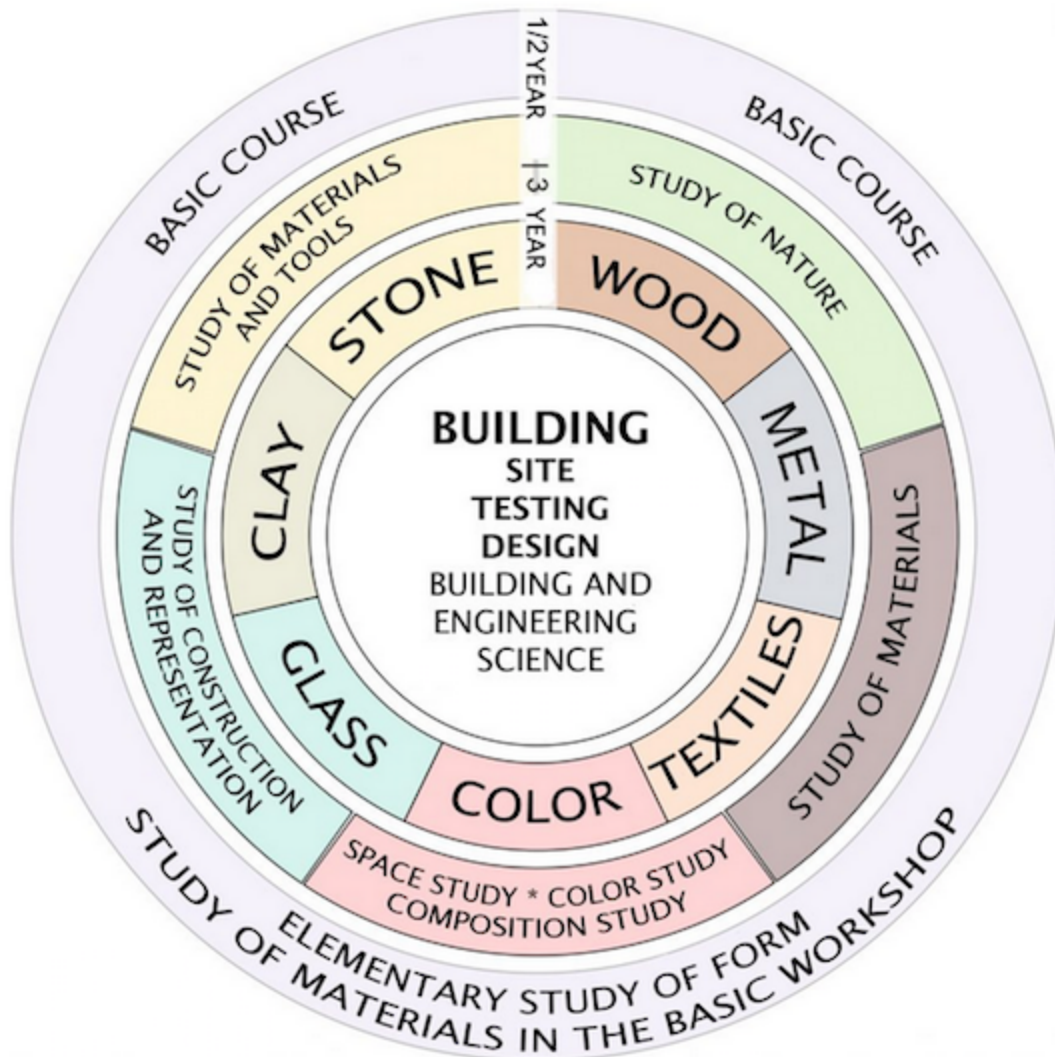
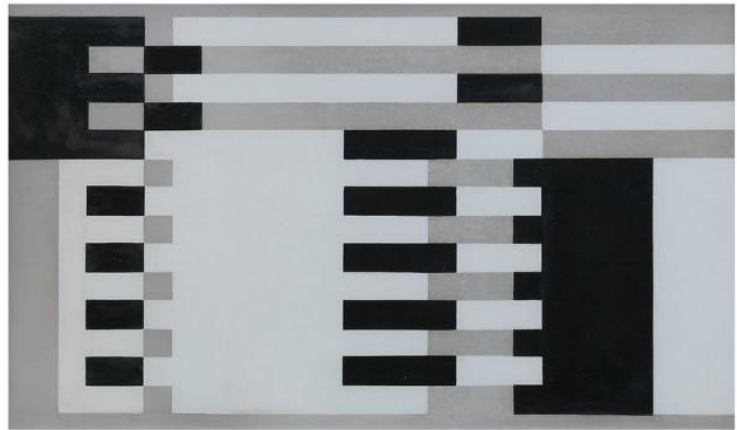
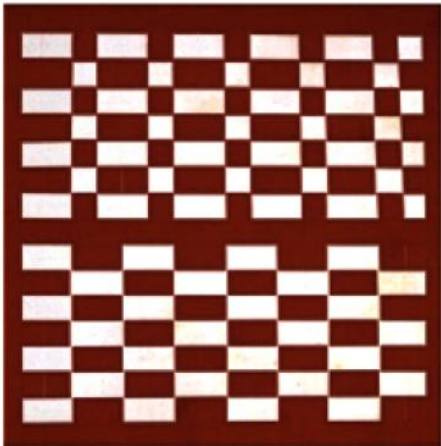


Diagram of the Bauhaus curriculum. Image courtesy of [SuperManu](#), CC BY-SA 3.0.

Gropius, a German architect, founded the Bauhaus school in Weimer, Germany in 1919. The school's curriculum called for a unification of the arts and crafts. Students received balanced instruction in both the fine arts (i.e. painting and sculpture) and applied arts (i.e. design and architecture). The Bauhaus' pedagogical program cited its core foundations via a materials based learning process. The aim of this program was to scaffold students' understandings of spatial relationships by having them employ multifaceted aesthetic forms and principles within natural and material environments (see the circular diagram above). These are nearly synonymous to the tenets of kindergarten that nurture an individual's passion for learning through their active participation with others, material objects and their internal and external surroundings. Modern art educator Frederick M. Logan (1950) writes that the Bauhaus and its offshoots (i.e. Black Mountain College) "is stressing, as the kindergarten tried to do in 1852, that education through vision and the sense of touch, and by means of the great richness of materials and tools now available, is all important."



Left: Paper weaving example made by a kindergarten teacher, in 1900.

Right: Josef Albers, [Interlocked](#) 1927

Albers began his career as an early childhood educator, teaching kindergarten in Bottrop, Germany. In order to develop his career as an artist, he enrolled at the Weimer Bauhaus in 1920. By 1925, he became a professor at the school, which had relocated to Dessau. In 1933, the Bauhaus closed due to the Nazi regime's fascist clampdown on culture and progressive education. Albers and his wife Anni (also an artist and educator), sought refuge in the United States. Not long after arriving in America, Albers became the head of the painting program at the renowned Black Mountain College in North Carolina, until 1949. His tenure as the head of the department of design at Yale University, which began in 1950, significantly altered the course of visual art and graphic design education.

Albers' experiences teaching young students via materials based experiential learning, led to his development of a sophisticated art educational curriculum centered around observing and working with color, shape and form. Albers' methodology for teaching at the University level was unique in that he largely replicated the instruction, which he employed during his time teaching elementary school students. His student-centered process of art instruction encouraged his students to explore materials and techniques in order to come up with their own unique observations and insights. Albers pronounced that "Instead of art I have taught philosophy. Though technique for me is a big word, I never have taught how to paint. All my doing was to make people see."

Albers' instructional [exercises](#), including using Color-Aid paper to actively explore color relationships (see: Albers, 1963), are analogous to the guided playful activities, such as paper weaving and folding that are a part of Fröbel Gifts and Occupations.



Left: Geodesic Dome inspired by Buckminster Fuller. Photo by Murgatroyd49, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons

Right: The 19th Fröbel Gift (aka the Framework Gift), which is utilized during the peas work Occupation.

The list of visual artists, designers and architects who utilized Fröbel Gifts to explore the [elements of art and principles of design](#) is impressive. Frank Lloyd Wright was given a set as a child and has mentioned how playing with the blocks encouraged his groundbreaking architectural work (see: [Fröbel's Gifts. Noguchi's Playgrounds](#)). Buckminster Fuller was also raised on Fröbel's manipulatives. His iconic geodesic dome design resembles the 19th Fröbel Gift (aka the [Framework Gift](#)) and the Occupation of [peas work](#), an activity using a combination of dried peas and sticks to build a variety of complex three-dimensional structures.

Starting with early modernist painters like Wassily Kandinsky, Piet Mondrian and Paul Klee, there are plenty of compelling cases involving visual artists whose work takes heed of kindergarten aesthetics and concepts. In Brosterman's *Inventing Kindergarten*, examples of 19th century kindergarten materials-based learning exercises using pre-cut shapes or parquets are juxtaposed with modern art paintings by Kandinsky, Klee, Mondrian and others. Brosterman's incredible research reveals that the aforementioned artists and architects all attended kindergarten during their youth. Mondrian, like Albers, started his career as an early childhood educator.

Kindergarten



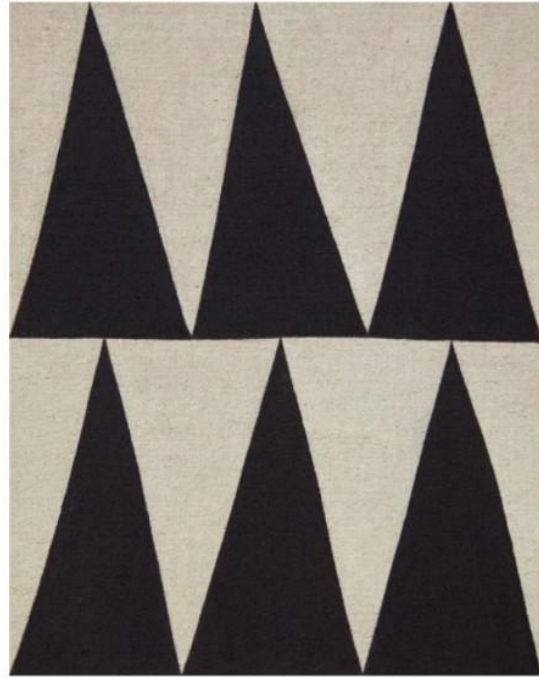
Modern Art



Above: Paper weaving ([Fröbel Gift no. 14](#)) by kindergarten student c. 1890.

Below: Piet Mondrian's [New York City I](#), 1942, oil on canvas.

Contemporary examples of kindergarten's reach within the visual arts are observed in paintings and installations by Antonio Ballester Moreno and sculptures by Vivien Collens.



Left: Antonio Ballester Moreno, *Plantas (rojas)*, 2019, acrylic on jute. Courtesy of [Pedro Cera](#), Lisbon.
Right: Antonio Ballester Moreno, *Mountains #2*, 2016, acrylic on jute. Courtesy of [Christopher Grimes Projects](#), Santa Monica, California.

Within Antonio Ballester Moreno's body of work, the concept of building on prior knowledge and experience is established through explorations that lead to insights within the framework of abstraction. His large paintings such as *Plantas (rojas)*, (2019) and *Mountains #2* (2016) utilize an essential visual vocabulary from the elements of art (shape, line, color, balance and form) to create archetypal imagery out of rudimentary geometric relationships. These paintings employ the aesthetics of geometry and abstraction to create new meaning and make connections to recognizable forms that already exist in nature. They illuminate how both natural and synthetic forms are all interrelated in our collective lexicon. This is akin to the way the Fröbel Gifts build upon each other and enable young children to expand their vocabulary, cognition and creativity through activities involving play with building blocks and other learning manipulatives.



Antonio Ballester Moreno, *Live the Free Fields*, 2019. Courtesy the artist and Maisterravalbuenna, Madrid

Moreno's [*Vivam os campos livres \(Long Live the Free Fields\)*](#) (2018) is a literal 'garden for the children,' which is the actual German translation of kindergarten. The sculptural installation consists of ceramic mushrooms and fungi sculpted by young students in São Paulo, Brazil, which Moreno arranged on the floor in the form of a mandala. The sculpture was part of *common/sense*, a group show that Moreno curated for the [33rd Bienal de São Paulo](#). The exhibition featured his own works of art alongside a display of objects from Fröbel's Gifts and several vintage mathematical games conceived by Fröbel.

Collens, *Broken Cube*, a colored wooden module used to construct her *Fröbel's Gifts* sculptures. Courtesy of the artist.

Vivien Collens' 'broken cube' sculptural motif is an ode to the manipulatives of Fröbel Gifts. The cube is a module that enables Collens to explore her aesthetic ideas in an active, hands-on manner that combines guided and spontaneous artistic processes. 'Broken cube' is a key component of Collens' [*Fröbel's Gifts*](#) sculpture series (2017-ongoing). The title of the collective body of work references processes and products associated with Fröbel and his active learning methodologies.

At large, Collens makes awe-inspiring art by creating and combining unique patterns, which she improvises by exploring a range of materials, colors, forms and scale. Collens likes to approach art in a playful way, seeing the process as a puzzle, which reveals the distinctive formal and conceptual directions that her work embodies (Collens, 2020). She began her career as a

painter, making geometric paintings that emphasize positive and negative space. Many of her paintings are informed by architectural and mathematical structures, such as the [International Style](#), Escher et al's [impossible objects](#) and manipulatives like Erector sets, which were inspired by Fröbel Gifts (see: Gitomer, 2017 and Head, 2011).

In 2015, Collens was focusing on painterly compositions she refers to as 'mockitecture.' The paintings came to fruition after her documentation of buildings and streets during walks throughout cities. The geometric forms in her [Urban Studies](#) (2011-2015) paintings reflect "the fenestration patterns, reflective facades, twisting spires, cantilevering, jutting balconies, planted roof gardens, water towers and odd shapes of today's urban architecture."



Vivien Collens, [City Blocks](#), 2015.

These paintings were the impetus for Collens to shift to making sculpture. In late 2015, Collens was playing around with painted blocks (wood scraps cut by the artist) and realized that their arrangements resemble urban architecture. Using blocks to create three-dimensional representations of subjects from life experiences is the crux of the [3rd](#), [4th](#), [5th](#) and [6th](#) Fröbel Gifts. These simple abstract forms become real-world associations and communicate, in the artist's words, "tactile expressions and explorations of crowding, spacing, growth, expansion and connection in urban areas." Similar to the Fröbel Gifts, which introduce additional materials or

tasks as students develop cognitive and creative techniques, Collens' *City Blocks* evolved with the introduction of translucent materials. According to Collens, these add-ons were inspired by the glazes and transparencies in her paintings, and reference the [glass curtain facades](#) of urban architecture.



Vivien Collens, *Draw/Build* by Mollie Rabiner (left) and Melanie Van Houten (right) from Josephine Sculpture Park. Courtesy of the artist.

Draw/Build is another set of sculptures that follow the pedagogical processes of Fröbel Gifts and Occupations. Collens creates interactive sculptural components that are intended to be arranged and rearranged by viewers who come to her studio. The pieces are colorful open trapezoid shapes, which can be stacked and juxtaposed to create unique compositions. After the viewer engages with these manipulatives via free play, Collens takes a photograph of the maker beside their creation. She then asks them to explain their thought process and any abstract or concrete associations that result from the final construction. Collens sees these modules as 'toys for adults,' which have the potential to hone our relationships to architecture, geometry and the creative process.

Artful learning makes the case for lifelong kindergarten, where mindful and playful activities (the Occupations) with materials (the Gifts) informs our understanding of the relationships between materials and the physical abstractions of the whole culture (Logan, 1950). Kindergarten's purpose is to teach children the foundations of noticing deeply, identifying patterns, making connections and nurturing the mind, body and soul. These are also [lessons](#) that all generations learn from the arts.

Educational resources for playful art-centered learning with manipulatives:

- [Artful Maths](#) – A great selection of lesson plans and materials combining art and math themes. Each subject reinforces mathematical and artistic thinking, utilizing skills such as “accurate measuring and constructing, visual problem solving and strategic forward planning.”
 - [Interaction of Color App](#) – Josef Albers’ seminal exercises in color have been digitized as an app for the iPad.
 - [Paper weaving lessons](#) from art educator extraordinaire, Cassie Stephens.
 - [Frank Lloyd Wright Foundations Virtual Classroom](#) is replete with STEAM-learning resources for educators, parents and students alike.
-

References, Notes, Suggested Reading:

- Albers, Josef. 1963. *Interaction of Color*. New Haven: Yale University Press.
- Brosterman, Norman. 1997. *Inventing Kindergarten*. New York: Harry N Abrams, Inc.
- Collens, Vivien. Personal interview. 6 January 2020.
- Cramer, Charles and Grant, Kim, “The Bauhaus and Bau,” in *Smarthistory*, 17 April, 2020. <https://smarthistory.org/the-bauhaus-and-bau/>. Accessed 10 January, 2021
- Gitomer, Aric. “Architects Love Their Toys.” *AGA Blog*, 21 April 2017. <https://www.aricgitomerarchitect.com/architects-love-toys/>
- Head, Jeffrey. “Kindergarten Gehry’s,” *Modern Magazine*, Winter 2011, pp. 122-129. http://www.jeffreyhead.net/uploads/Modern_Scan_website_toys.pdf
- Logan, Frederick M. “Kindergarten and Bauhaus.” *College Art Journal*, vol. 10, no. 1, 1950, pp. 36–43. *JSTOR*, www.jstor.org/stable/772366. Accessed 8 Jan. 2021.
- Peabody, Elizabeth. “Papers on Froebel’s Kindergarten” republished from *The American Journal of Education*. 1890. P. 674.
- Weschler, Lawrence. “The Kindergarten of the Avant Garde.” *Glasstire*, 3 August 2014. <https://glasstire.com/2014/08/03/the-kindergarten-of-the-avant-garde/>