International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.48047/intjecse/V14I8.429 ISSN: 1308-5581 Vol 14, Issue 08 2022

Classroom Aesthetics in Early Childhood Education

Dr. G.DEVI
Lecturer in Psychology & Physical Sciences
St. Mary's Centenary College of Education
GNANAPURAM
Visakhapatnam- 530004
Andhra Pradesh

Abstract
While discrete elements of classroom design can be defined and taught to early childhood educators, the aesthetic element is less accessible as a point of entry, particularly in relation to how the classroom and curriculum are activated, engaged with and embodied. Given the transformative nature of classroom spaces, it may be better to describe classrooms as *holding* an aesthetic that is determined and defined by those who occupy and participate in the space at any particular time. The following article will discuss ways that we might begin to articulate and apply an aesthetic lens to early learning classrooms using an arts-informed framework to critique play-based classroom space purposed for children's exploration and inquiry.

Keywords: early childhood education, play-based classrooms, classroom design, classroom aesthetics

Introduction

Aesthetics in concert with classroom design and curriculum generates implicit and explicit messages that inform and contribute to the process of teaching and learning. Early childhood environments are dynamic, mercurial spaces, continually being repurposed and recontextualized by the teachers, children and curriculum in which they are occupied. Even well-designed, well-intentioned spaces become disrupted and reconfigured, potentially altering our perceptions of purpose and curriculum. For the purposes of this paper, if we are willing to accept the notion of the classroom as the medium and the design of the classroom as integral to the teaching and learning experience, then perhaps pedagogical environments, given their propensity for modification and transformation, are better described as *holding*, or temporarily embodying an aesthetic that is determined and defined by the occupants at any given time.

To examine the thesis of *held* aesthetics in a living pedagogical space, it seemed only fitting to take an alternate approach and apply an aesthetic lens to challenge and move beyond narrow constructions of curriculum and learning environment. A framework based on traditional, formal elements of art and principles of design was used with in-service primary teachers as an exercise taking place within their 6 semester diploma program entitled Learning in the Early Years (LEY). The following paper describes the process that was undertaken to deliberately investigate space purposed for children's exploration and inquiry within the play-based classrooms of the teachers enrolled in the LEY graduate diploma program. This was undertaken with the goal of amplifying the concept of held aesthetics so that teachers could engage in a critical reflection about room elements and deliberately engage with their classrooms as a point of departure for their own inquiry into classroom research and curriculum planning. It was understood that alternate frameworks may be constructed using these same design elements and principles, and that meaningful pedagogy in early learning classrooms is similarly dependent upon the teacher-student interface and predicated on relationships, inspiration and engagement through social construction within and outside the classroom, and that there exist other positions from which to examine the composition, nuances and complexities of early learning environments.

An arts-informed framework provides an alternate lens for critique, and concurrently, some additional language for discussion and understanding of the classroom environment. In this exploration of held aesthetics it is acknowledged that contesting the arts-informed framework in light of other pedagogical and or developmental considerations is a natural part of the dialogic exchange. To deepen this

discussion, student teachers enrolled in the LEY program were invited to deconstruct their classroom environments and engage in critical reflection (Brookfield, 2005) as part of the teacher inquiry methodology (Cochran-Smith & Lytle, 1993; Cole and Knowles, 2000) embedded within our in service teacher professional development program. Using the lens of critical reflection we suggest that every niche or play space and the materials that they are provisioned with should be considered in light of the possibilities to link functional elements with form, to both yield greater complexity and engagement and a more sophisticated pedagogical aesthetic.

Principles of Room Design and Arrangement

In early childhood education this latter point has been taken seriously in the schools of Reggio Emilia where pedagogues see aesthetics as an activating agent in teaching and learning (Vecchi, 2010). The classrooms of Reggio Emilia have been a source of aesthetic inspiration in early learning communities in both Canada (Fraser & Gestwicki, C., 2002; Tarr, 2001; 2004; Wien & Callaghan, 2007; Wien, 2008), and the United States, (Cadwell, 2003; Curtis & Carter, 2000; 2003; Edwards, Gandini, & Forman, 1998; Guidici, Rinaldi & Krechevsky, 2001; Friedman, 2005; Fu, Stremmell & Hill, 2002; Katz & Cesarone, 1994; Lewin & Benham, 2006; Pelo, 2007; Topal & Gandini, 1999). As do Postman and the architectural designers previously mentioned, these authors see the classroom environment as integral to the teaching and learning messages we deliver to young children, and value held aesthetics within a living pedagogical space. Reggio inspired design principles include for example: 1) creating a community focus to foster relationships, communication and curriculum development, 2) the use of transparency in the environment through indirect and natural lighting and transparent materials, 3) the inclusion of natural and authentic materials, 4) bringing the outside into the classroom to create areas of natural beauty, 5) the provision of dedicated spaces to minimize transitions and allow children's building and exploration to continue over a sustained period, and importantly, 6) pedagogical documentation to capture children's messages about their classroom environment and to understand deeply their learning experiences, theories and ways of knowing.

In early learning settings, where possible, room arrangement should be harmonized with the classroom schedule. This heuristic is useful to create a classroom flow that honours children's natural rhythms while providing holistic experiences that appeal to children's sense of intrinsic exploration and curiosity (MacNaughton & Williams, 2009). Young children's need for a flexible schedule with uninterrupted blocks of time for investigations and material exploration are logical starting points when considering a living pedagogical space.

Integrating the elements of room arrangement, materials, and classroom schedule, with the individual learning needs of children in conventional elementary classrooms is often challenging. While many contemporary architects are willing to explore space creatively and would enthusiastically accommodate requests for natural lighting and dedicated space for meals, play, and rest time, typically teachers work within traditional classrooms constructed with deference to children's holistic social and physical learning needs, interests and biological rhythms. Traditional classrooms were designed to support a transmission model of teaching, an archetype that framed the teacher as "sage on the stage" whose power and position drew support by a classroom envelope where students were assigned to desks in rows facing the front of the class. Working within this traditional built environment has been the reality for all of the 39 teachers enrolled in the LEY graduate diploma, with the exception of one teacher who has natural lighting from high ceilings and skylights in her class, another who has an expanded windowed space with a small room adjoining her class. Other teachers were also fortunate to be working in classrooms that had a sink, adjoining washroom, and direct access to the outdoors, but most were working with classroom space that was box-like with simple and utilitarian consideration to cloakrooms or cubby areas. Creating a livable space from this type of conventional classroom footprint can be challenging, particularly when these teachers also inherit desks or tables and shelving that already has an "institutional" look and feel. In these cases, function trumps form creating a homogenous and sterile build environment complete with hard surfaces and stark colors.

In traditional classrooms the institutional look and feel is often exaggerated by overhead ballast lighting similar to that used in supermarkets. This further contributes to a stark classroom appearance and sets

students and teachers on alert with the message that this is a functional place to work but not necessarily a place to live and thrive. One
solution is to make use of indirect light from lamps, light tables, or light ropes to soften or tone down the appearance of the room and create a home like atmosphere where children and teachers feel at ease. Following a discussion of child-centred room arrangement, furniture, materials and design elements, teachers in the LEYs program were challenged to break free from conventional thinking and particularly the confines of traditional classrooms by playing a design game using moveable gaming pieces representing furniture and materials that could be arranged any way imaginable within a rectangular structure. Teachers in the LEYs program were asked to consider the possibilities that might still be present in a rectangular built environment by engaging creatively with the gaming pieces and were encouraged to look for ways to balance the institutional look and feel with softer elements necessary for comfort and serenity. By balancing the hard surfaces of floors and tables with area rugs, pillows, and a soft couch for reading, or the sterile functional properties of laminate tables with natural materials such as plants, earth, sand, and water tables for play and investigation, our conversations with the teachers begin to move toward the elements that make up a living pedagogical space. In addition, the following principles were reinforced to the teachers in the LEYs program through presentations of slides and discussion: Proximity and Flow, and Open and Closed ended Properties.

Proximity and Flow

To minimize transitions and disruptions across the school day, proximity and compatibility are often considered in early learning settings. This can be thought of in terms of compatible classroom zones (Shipley, 1998) or activity types where the focus of interest is consistent and proximate to relevant materials. If we think of proximity, compatibility and flow as continuums, in concert with the child's daily rhythm we can begin to construct possibilities that honour the complexity of holistic learning through projects and across modalities and avoid the narrow thinking that comes with discipline or subject specific investigations (Morin, 2001; 2008). Continuums of movement, interaction and investigation can be blended combinations ranging from active to still and social to solitary, indoors to outdoors, or divergent to convergent. Messages from niche areas within the classroom environment should be clear, interesting, and inviting, suggesting: "This a good place to draw and write", "This is place to dance and move", "This is a place to dress up and be with others", "This is a place where I can explore nature". Overall the pedagogical message conveyed to the child should be "This is a good place to belong", "I feel connected to these people, this place and these experiences".

The concept of classroom zones, proximity and continuums might also be extended to opportunities within those niche areas we call play spaces. Thinking divergently about material selection and space, the teachers in the LEYs program were asked to reflect on how natural materials, contrasts in texture and form, and contrasts in purpose can be made available to children so that multiple possibilities abound. To make classroom space interesting and complex these principles of proximity and compatibility can be considered divergently by asking: How can space in one area of the classroom inspire or catalyze space in another area? How might children move materials across play spaces to combine building with dramatic play, art with science or reading with writing or math? What can be added to these play spaces so that they better reflect the children and their families? How can the classroom environment allow children to self regulate and meet their needs for active and quiet moments, and social and solitary pursuits? By generating possibilities of compatible proximal combinations or catalytic play spaces, these teachers were able to begin to anticipate movement and flow within and outside the room and offset potential disruptive exchanges or children's feelings of alienation within the classroom. By projecting a graphic drawing of a non-example that showed poor design proximity and potentially conflicting play space such as noisy areas in the immediate vicinity of a quiet space (i.e., the constructive play area close to the writing and reading area), teachers in the program were able to discuss the potential conflicts that could arise. Other potentially incompatible areas such as the sand and water table were problematized. Why might this be an incompatible area? Why is the "problem" of water and sand mixing engaging for children, and how can this be re-constructed as an opportunity for exploration.

Open and Close Ended Properties

When materials and living space are dedicated they have fewer open-ended qualities and messages. For example a puzzle or board game with rules has a clear external message implicitly or explicitly stating what is required of the participants, the number of children who can be engaged, and the outcome. Compared to the open ended divergent options available from socio dramatic play with props and dress up clothes or blocks with reusable loose parts, puzzles and games with rules afford different learning opportunities and a clear right or wrong "use message". Honouring possibilities at either end of these continuums is necessary to create an interesting challenging classroom where children can be engaged in a variety of ways and develop complementary sets of skills and foci.

Towards an Aesthetic Framework: A Living Space

The next step in supporting the LEYs teachers' critical reflection of their classrooms was to introduce an arts-informed framework to investigate how an early childhood classroom space can be occupied and appropriated aesthetically. It was inspired, in part, through discussions between the authors about the use of colour and texture in the classroom, and how teachers often ascribe to the belief that primary colours and plastic texture are acceptable forms for the learning environment. To contest this notion, we decided to engage in an alternative discourse with the LEY teachers using an arts-informed framework of: Line and Movement; Shape and Colour; Pattern, Rhythm and Texture; Foreground, Middle ground and Background. This framework was introduced with the proviso that no definitive, analytical conclusions need be reached and was an end in itself. The teachers were invited to bring a selection of photographs they had gathered of their classrooms and engage in an arts-based critique of the room elements using the aesthetic overlays to highlight different features (shown in Figures 1 through 10). We also felt it was important to note to the LEYs teachers that while there may be many dimensions and points of reference in their classrooms, the photographs that they chose to critique represent only one angle and one perspective, that is, the biased, preferenced perspective of the photographer.

Line and Movement

We began by discussing line and movement as key elements in directing the viewer's eye through and around objects within a designated area. In works of art, in addition to literal, visible line, artists often use what is referred to as implied line - no visible line is present between objects but a connecting line is suggested. The viewer continues to move around the image by following the suggested line in a similar way that one would follow a visible line. Executed well, line (literal or implied) creates a visual path for the viewer, whereas suspended or disrupted line can leave the viewer searching for the next point of contact.

Although not always easy to alter, decisions regarding placement and dominance of colour can affect how a space is expected to function. Tarr (2004) posits "While much of the early childhood literature suggests that rooms for young children be colorful, color is too often used for its own sake rather than deliberately chosen to enhance a particular area or to create a sense of unity throughout the room (p. 4). From the pictures taken by our LEYs teachers, we found the overall palettes of most of the classrooms were generously filled with primary (yellow, blue, red) and secondary (orange, green, purple) colours as is typical in most Western Early Childhood Education classrooms. These colours at full saturation, along with perhaps additional tertiary colours, are also found in the drawing tools of young children, playground apparatus, toys and packaging. Most kindergartens and elementary school playgrounds are alive with strong, bright, stimulating hues. While engaging to look at, we discussed how these vibrant, saturated colours demand attention and may be unnecessarily stimulating. In a work of art, pure, saturated colour is used to make a feature or image 'pop out'. An artist will balance pure colour against tones and shades of colour to provide nuance or temper the intensity. Is it possible that when it comes to children we have only assumed that they have a preference for saturated colour? Have we confused what colours children notice first with what colours they actually prefer or what colors might be more congruent with the expected function of the room?

Children live in, and are subjected to the same nuanced living palette as adults and do not necessarily lack sophistication in colour discernment. When left to choose their own palettes, to mix colours freely, children often reveal an innate sense of colour balance. When producing works of art that contain strong primary and secondary colours, children will often use complementary or analogous

colours that do not compete with but harmonize with one another. A playhouse (painted by children) displayed in one of the LEY teachers' photographs revealed that primary colours were only used to punctuate a more neutral predominant background area. Rather than projecting colour preference onto children and perpetuating the myth that we, as adults, are wise to their preference, is it possible to tap into the sophisticated palette each child already embodies? If children demonstrate an initial lack of discernment in their use of colour, can it be seen as an opportunity to further develop their relationship with colour through the use of purposeful activities that engage them in the experimental use of colour in a manner that contributes to the classroom aesthetic.

Given the multicultural composition of classrooms today, children arrive imbibed with their own sense of colour derived from homelands of different shades and tones. Whether it be the blue of the Mediterranean, the copper sands of the Sahara, the steely gray of corrugated tin roofs or the neon lighting of an urban centre, we cannot preference children's colours for them without stripping them of meaning and relevancy. Classroom aesthetics can signify an inclusion and acceptance of those that inhabit the classroom space.

Pattern, Rhythm and Texture

The often welcomed element of variety that creates visual interest in a space can also at times overwhelm, resulting in a feeling of chaos, entropy and/or dis-ease. To settle the clatter of too many things taking place at once, visual data can be ordered and chunked, allowing for easier recognition of and access to information. Repetition, pattern and rhythm panned effectively can build and slow energy, transforming visual elements into richly texturized, meaningful compositions.

As evidenced in the photographs taken by the teachers in the LEY program, busy classrooms filled with colourful objects, artwork and displays can quickly become visually chaotic and cluttered. The LEY teachers noted that their classroom spaces are often filled with a variety of objects that are in constant motion as they are displaced and replaced throughout the course of a day. Maintaining an environment that does not become too chaotic requires a certain amount of categorization and organization. Unfortunately, organization and ordering are often associated with sterility or conformity, which can render objects untouchable, privileged or isolated. However, ordering may simply be a way of purposefully and intentionally managing the diverse details comprised in a classroom so that they are less likely to be lost or compromised.

The top row of saturated colours exemplifies how the energy of primary colours can be slowed and concurrently how more neutral or monochromatic colours along the bottom become texturized and are no longer discounted or marginalized. Figures 6 and 7 illustrate how texture can unite and categorize objects by association. The gauze fabric, soft and transparent, threads together random shapes and colours into a whimsical hanging. Conversely, the smooth, hard surfaces of glass, tabletops and trays share the bond of cleanliness and uniformity. Both beg to be touched and handled, offering the promise of different pleasures, and the memory of the presence of children in the weeks before.

However, pattern and rhythm are more than the mere organization of objects. Pattern and rhythm capture the specific selection, placement and reconfiguration of details (and the spaces between the details) building texturized syntaxes, both actual and implied. Within a pedagogical environment, the notion of rhythm, pattern and texture extends beyond the visual elements and objects to the predetermined routines and activities orchestrated by the educator. Additionally, layered beneath these routines and activities is the individuality each student embodies and brings to the life of a classroom. It is this layered complex juxtaposing of the chaotic and the organized, the undetermined within the determined, the organic unity that generates the heartbeat of the classroom.

The complex rhythms, patterns and textures residing overtly and tacitly within a classroom are what render a pedagogy tactile, bringing a depth and richness to a space paralleled only by the vibration and energy of the nuanced complexities of children's cultures, interests, and curiosities. Although the LEYs teacher's photographs were devoid of children, we noted that these educational spaces were not occupied only by diverse materials and textures but also by diverse participants who came with the

rich textures and tastes of their foods, their clothing,
their experiences, what keeps them warm, what makes them afraid, what gives them comfort and, of course, what brings them personal pleasure. A tactile pedagogy lies in the tangible, the intangible, the smooth, the gritty, the accessible the inaccessible. It lies in every bump, every crevice, every transition. It is the visible and invisible layers that extend from the haptic to the conceptual.

The patterning and grouping of children can speak deeply to how we have layered our sociopolitical cultural values. While children are not engaged to the same extent as adults in the process of consciously circumventing and partitioning a classroom for the purposes of play, activity or instruction, they are often acutely aware of the codifications and assignments that adults use to shape environments and may respond with their own forms of patterning. We encouraged the LEY teachers to watch and listen to the children's patterns in their classrooms so that the children themselves could provide insight into ways of ordering and arranging the classroom space so that as teachers, they could be more responsive to child sensing rather than simply adult forms of sense making. Notably, along with such insight, we risk an invitation into the darker side, when repetition and patterning results in homogeneity or profiling and when texturizing manifests as exclusion rather than enrichment. It is unlikely that teachers will be able to recognize and attend to all of the complex undulations of a classroom at any given time. The notion of ordering in the hope of creating a harmonic, enticing rhythm, while perhaps desirable, is a complex task and may at times feel more like the dissonance of John Cage than the reflexive melodics of Bach. However, if cognizant of how the mechanics of selecting, sorting, and reformatting detail affects meaning, then attending to the composition and dispositioning of pattern, rhythm and texture can become a way of developing a potent, heuristic that includes the sensibilities of the child and the classroom rather than merely an exercise in taming chaos. At times we may have to trust that the transparent gauze can be just as durable as a hard, smooth surface.

Foreground, Middle Ground, Background

When viewing a static, two-dimensional image, it is relatively easy to identify what area constitutes the foreground, middle ground and background. In a dynamic, three-dimensional space, the concepts of foreground, middle ground and background are much more difficult to negotiate and rarely, if ever, can boundaries be clearly defined. In a dynamic space such as a classroom, each participant will have a natural tendency to centralize his/her position as the foreground circumvented by the middle ground and subsequently the background. Philosophers such as Foucault (1970) and Berger (1980, 1972) have written extensively on the positioning of the viewer and the viewed and how the relationship between seeing and being seen becomes a complex perceptual construct. The adjudication of whom or what might be central or foregrounded is a matter of perspective.

To further examine foreground, middle ground and background with the LEY teachers and their photographs of unoccupied educational spaces, we needed to acquire a more objective stance. We could do little more than speculate on the possible composition of foreground, middle ground and background and how they might inform pedagogical practice. This was further complicated by the fact that as active, dynamic spaces, the grounds within each classroom space would always be shifting, affecting the function and functionality of the room. For the purpose of an exercise in understanding occupied space, teachers were asked to consider what appeared to be the focal point, or foreground, of the space in their photographs.

We recognized that our reading of the classroom compositions were temporal and would quickly shift compositionally and pedagogically once the space was occupied. In an occupied space, the foreground would likely no longer be determined by objects but by active participants. Whether student-centred or teacher-centred, the foreground becomes mobile and flexible. The exercise of envisioning what is or is not central, where we are or are not positioned, how we hold or do not hold agency, the relational proximity of us to other, is already engendered in the activity of learning. The very foundation of pedagogy is based on students coming to know and comprehending the vast world beyond the classroom space by remembering, exploring and imagining, thereby shifting the foreground, middle ground and background from a strictly pedagogical landscape to a landscape beyond the classroom. It

extends our epistemology of school to align more closely with educational practices that value community involvement (Cajete, 1994; Cannella & Viruru, 2004; Dahlberg, Moss & Pence, 2005). The line of vision for pedagogical space expands, opening the view, the viewers and the viewed to other possible interfaces. As we see out into the community, the community sees in, while we see into ourselves we see out to others, while we look up to open space we look down to a hub of activity. The pedagogical dimensions unfold, affecting the internal dimensions of those who participate.

Classrooms as Holistic Space

Attending to the aesthetic in the classroom echos Eisner's critical theory of connoisseurship that utilizes the language of criticism in the arts for evaluating educational phenomena (Eisner, 1998). In early childhood environments, adding an aesthetic lens proposes an alternate approach and challenges the disposition of pre-service and practicing teachers to move beyond narrow constructions of curriculum into a more relational pedagogy that honours the context of our learning environments. While aesthetics can potentially soothe and excite the senses, they can also dislodge, inadvertently affecting the functionality of a space returning us, and our teachers, to the question of purpose and intention. Recognition and awareness of how aesthetics inform and contribute to the pedagogical experience helps us to better understand and align intention with the critical, dominant messages generated through the design of our environments. The aesthetic of line and movement provide valuable information as to the physical and kinesthetic boundaries to which we tacitly ask children to adhere. Colour and shape lay bare our judgments of the assumed preferences of young children. Pattern, rhythm and texture reveal the kaleidoscope of difference that lies beneath the visible surface. And foreground, middle ground and background raise questions about the possibilities for positioning ourselves individually and collectively.

Classroom aesthetics do not lie solely in the beautification or decoration of our surroundings, but are *held* in the perceived and embodied collective of the design, the participants and the curriculum. A living pedagogical space is constructed, hopefully in a manner that honours the personal, visual and sensed aesthetics that determine the life of a classroom. As students are moved through a curriculum, there are many ways of coming to know that build capacity for growing rich, inclusive relationships and communities. Building an aesthetic literacy around classroom spaces strengthens the internal compositions and fosters pedagogical and cultural literacies. Design, aesthetics and pedagogy are all integral, critical aspects to a dialogue that nurtures more holistic, transformative pedagogical experiences.

References

1. Cannella, G. S., & Viruru, R. (2004). *Childhood and postcolonization: Power, education, and contemporary practice*. New York, NY: RoutledgeFalmer.
2. Curtis, D., & Carter, M. (Eds.). (2000). *The art of awareness: How observation can transform your teaching.* St Paul, MN: Redleaf Press.
3. Curtis, D., & Carter, M. (2003). *Designs for living and learning: Transforming early childhood environments.* St.
4. Paul, MN: Redleaf Press.
5. Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care: Languages of evaluation* (2nd ed.). New York: Routledge.
6. Dyck, J. A. (2002). The built environment's effect on learning: Applying current research. *Montessori Life, 14*(1), 53-56.
7. Edwards, C., Gandini, L., & Forman, G. (Eds.). (1998). *The hundred languages of children.* Norwood: Ablex Publishing, 239-60.
8. Eisner, E. (1998). *Enlightened eye: Qualitative inquiry and the enhancement of educational practice*. Upper Saddle River, NJ: Merrill.
9. Foucault, M. (1970). *The order of things: An archaeology of the human sciences*. New York: Pantheon Books. Fraser, S., & Gestwicki, C. (2002). *Authentic children: Exploring Reggio Emilia in the classroom.* Albany, New
10. York: Delmar.
11. Fu, V. R., Stremmel, A. J., & Hill, L. T. (2002). *Teaching and learning: Collaborative exploration*

of the Reggio Emilia approach. Upper Saddle River, New Jersey: Pearson Education Inc.
12. Guidici, C., Rinaldi, C., & Krechevsky, M. (Eds.). (2001). *Making learning visible*. Cambridge, MA: Reggio Children.
13. Katz, L. G., & Cesarone, B. (Eds.). (1994). *Reflections on the Reggio Emilia approach*. Urbana, IL: ERIC Clearninghouse.
14. Pelo, A. (2007). *The language of art: Inquiry based studio practices in early childhood settings*. St Paul, MN: Red Leaf Press.
15. Postman, N., & Weingartner, C. (1969). *Teaching as a subversive activity*. New York, NY: Delacorte Press. Shipley, D. (1998). *Empowering children: Play based curriculum for life long learning*. Toronto: ITP Nelson. Tarr, P. (2001). *Aesthetic codes in early childhood classrooms: What art educators can learn from Reggio Emilia.*
16. Retrieved from http://www.jstor.org/stable/3193922
17. Tarr, P. (2004). Consider the walls. *Young Children, 59*(3), 88-92.
18. Topal, C. W., & Gandini, L. (1999). *Beautiful stuff! Learning with found materials*. Worcester, Massachusetts: Davis Publications, Inc.