

Why Do Schools Look Like Crap? Reimagining Our School Spaces to Make School What It Should Be

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Abstract

Our schools are the headquarters of arguably the most important work there is, which is to educate children and prepare them to be happy, successful community members. This work should be done in spaces that look and feel good, supporting and amplifying the academic and emotional growth that goes on inside these spaces. Rather than focusing our attention on just test scores and curriculum design, we must rethink the way we design and use our school spaces. The aesthetic elements of our schools matter, and by revamping the way our schools look and feel, we can directly impact our students' academic and emotional growth. This is also true for the way we think about and use our learning spaces. By incorporating more movement throughout the school day and pushing the learning process beyond the classroom walls, we provide students with a dynamic learning environment that offers practical learning experiences and diverse spaces for social, emotional, and intellectual maturation.

Keywords: outdoor classrooms, experiential learning, community engagement, aesthetics, emotional wellbeing, academic growth, physical space, student experience

Introduction

Drab colors, cold concrete halls, and humming fluorescent lights all seem designed to sap the creativity and personality out of humanity. Some might argue that this visual effect is ideal for prisons, but would anyone argue that it is appropriate for schools? With all we know about learning, why do our schools still look like crap? Without a doubt, the physical environment of a space impacts the way people feel inside that space. The way people feel inside a space impacts what they can and cannot do inside the space. We must ensure that our schools are physical spaces that prepare students for success. By being intentional and creative about the aesthetics of our schools, and harnessing the potential of our learning spaces inside and outside the classroom, we can improve the academic and emotional wellbeing of our students.

Aesthetics

Schools should be physical spaces that take the emotionality of students and teachers into consideration. Education is a human experience built upon the sharing of ideas and experiences among people. Naturally, this exchange is impacted by the emotions of teachers and students. Teachers who are emotionally regulated form better relationships with their students and are more engaging, while students who feel happy, confident, and safe are more receptive to the learning process. When we think about improving our schools, this humanistic element of education often gets overlooked, with the priority placed instead on data, curriculum, and outcomes. In the last few decades, we have gained a better understanding of why the human elements of education, especially emotion, are so important. Once thought of as something that interfered with learning, we now understand that emotion is a necessary, fundamental piece of the learning process. In fact, the neural process of cognition, or acquiring knowledge, is not possible without emotion (Immordino-Yang, 2015). Emotions impact our ability to form meaningful relationships and research shows that positive interpersonal relationships in school lead to greater academic engagement and overall school satisfaction (Connell & Klem, 2004). Because education is an interpersonal, shared human experience, the relationship between students and teachers is a crucial factor in creating a positive school experience.

By making schools visually uplifting and engaging spaces that foster positive emotions, we can create more positive school experiences for students and teachers. Although the physical aesthetic of the school space is not dependent upon human relationships, it is a factor that helps foster these essential connections in schools and can support the emotional wellbeing of students and teachers. The lighting, wall colors, and use of meaningful wall decor are three aesthetic elements that deserve our attention in schools and make a positive impact.

Arguably, the lighting in schools is the most important aesthetic element, because it directly impacts our biological human functioning (Wurtman, 1975). Traditionally, school buildings have been fitted with fluorescent lighting, which studies suggest may increase student hyperactivity and anxiety (Wilkins & Winterbottom, 2009). Ideally, our

schools should incorporate as much natural daylight as possible, and use LED lighting that can be controlled via lamps or dimmers when needed. Research suggests that LED lighting increases student engagement, focus, and positive behavior (Kanakri & Morrow, 2018).

It comes as no surprise that teachers are not immune to these benefits. Studies have found that teachers prefer daylight to be the primary light source in their classrooms, and also like to have control over the lighting sources and levels (Wilkins & Winterbottom, 2009).

In addition to the lighting in schools, the color used in the physical space is another essential aesthetic element. This begins with the colors on the walls and extends to the colors of chosen furniture, accessories, and decor. There is plenty of research on color theory strengthening the connection between color and human emotion. Although both the theoretical and empirical research in this area is still considered new and underdeveloped (Elliott, 2015), there is consensus that color evokes emotion in humans, which is why our schools should be colorful spaces. Specific colors impact individual people and their emotions differently, which is one benefit of using a variety of colors within the school space. Some studies have shown that pale colors were perceived by students as more calm and pleasant than vivid colors. Moreover, the color blue was found to put students in a more positive emotional state than other colors (Al-Ayash et al., 2015). Aside from the impact of color on emotion, other studies have highlighted a link between colored walls and overall academic success (Ogita & Pothong, 2021). Too much color can pull students into the distraction zone but a palette of two-three complimentary colors can provide subtle interest and personality. The color, textures, and patterns of school furniture and decor can unify and enhance the palette and offer another avenue for more appealing school spaces. For example, simply adding rugs and pillows to a classroom can convey comfort and expression.

Color and lighting are not the only aspects of school interiors that require revision. We should also be intentional about using meaningful and motivational wall decor. It is the twenty-first century and our students' Minecraft addled brains do not want to look at a cork bulletin board of poorly cutout apples with kitschy slogans haphazardly pasted on them. The words and images on school walls provide another avenue for conveying important messages to students throughout the school day, and these should be both motivational and educational messages. But we cannot overdo it. Some studies have found that students in heavily decorated classrooms were more easily distracted (Fisher et al., 2014), which is why wall decor must not be superfluous and designed to either motivate or educate. One powerful and effective technique is to post motivational quotes from people connected to the academic subject throughout the classroom. Inspirational quotes can foster positivity and comfort in the classroom, as well as help students think about themselves and their own lives in new ways (Price-Mitchell, 2018). The visual aspect and location of these displays are important. It can be the most inspirational quote in the world but if it looks like crap, who is it inspiring? Large lettering, diverse fonts, and incorporation of iconography can accentuate the meaning of the most mundane mantras. For example, designing a math corner with multiplication charts, common formulas, and divisibility rule reminders can get students out of their seats and interacting with the decor as part of their learning process.

Attention to these three elements rarely goes unnoticed. Students quickly recognize the uniqueness of schools that incorporate more natural lighting, diverse colors, and expressive decor, and the difference they feel in these spaces can inspire a new mindset towards their school experience. This is especially true for students who have struggled in previous schools. By designing novel, engaging, and comfortable spaces, we break the traditional visual paradigm, enabling all students to start fresh with a positive mindset about learning.

Redefining the Classroom

Even if we give schools an aesthetic facelift, the classroom can still be a constricting and sedentary space jam packed with teenagers who must slither/chafe their way out of fixed desks on their way to the bathroom. Teacher shortages lead to larger class sizes, which exacerbates the space problem to the point where our classrooms have become silos for stockpiling children. Solving this problem starts with redefining the classroom space by using flexibility and innovation to reimagine the ways we use our classrooms. By removing the spatial limitations and physical restrictions we place on students, we can create a new image of the classroom that offers expansive opportunities for both academic and emotional student growth through diverse learning environments and physical movement.

One solution is outdoor classrooms. The data reveals that outdoor learning improves students' emotional wellbeing, confidence, behavior, academic achievement, and interest in learning (Meighan & Rubenstein, 2018; Taylor & Kuo, 2008). Outdoor learning can also positively impact the attention levels of students with disabilities, as well as increase teacher wellbeing and interest in teaching (Guardino et al., 2019). Studies that tracked student cognition in outdoor classrooms show that it can prompt higher-level learning on Bloom's taxonomy, particularly the analysis and problem-solving tiers (Stetson, 1991; Kutsunai, 1994; Waliczek et al., 2003). Similar studies have shown that spending time outside can improve working memory, cognitive flexibility, and ability to control attention (Weir, 2020). In addition to this cognitive growth, students immersed in outdoor classrooms become more knowledgeable about the environment and their role in the environment (Francis, 1997).

By taking learning outdoors, we also take advantage of the many therapeutic benefits of nature. From the soothing effects of nature's sounds to the sun's ability to improve mood, contact with nature improves emotional wellbeing, increases happiness, reduces stress levels, and nurtures more positive social interactions (Weir, 2020).

But what do the students think about outdoor learning? A study of Kindergarten student perceptions of outdoor learning indicated that most students wanted at least some outdoor learning during a normal school day. Half of the kindergarteners interviewed preferred outdoor classrooms over indoor classrooms (Guardino et al., 2019). An analysis of elementary students' written responses not only revealed that outdoor learning produced positive attitudes toward learning math and science, but that students also found outdoor classes fun, novel, interesting, and enjoyable (Waliczek et al., 2003). A survey of 133 middle school students that participated in outdoor learning found that students felt comfortable outside and outdoor learning evoked positive emotions (Stroud Water Research Center, 2021). Other research on middle school students' opinions showed high levels of support for outdoor science learning, especially when they were involved in designing their outdoor classrooms (Burnett, 2021). Students across grade levels share positive views about outdoor learning.

With these many benefits, there are also some caveats. Some students may not attribute the growth that occurs during outdoor learning to the outdoor setting. As such, outdoor learning should be accompanied by teacher-led student reflection (Sjöblom & Svens, 2019). Additional barriers to utilizing outdoor spaces include a lack of resources, class sizes, weather conditions, teacher experience, and test-focused administrative policies (Davies & Hamilton, 2018). Even so, outdoor learning offers students and educators a less physically restrictive environment where impactful learning and social-emotional growth can occur.

Funding conditions, administrative policies, and school location may limit opportunities for outdoor learning, but there are ways to diversify the learning environment without leaving the confines of the school building. Physical movement when linked with sound pedagogical practice can improve student engagement, behavior, health, and performance (Zeng et al., 2017; Daly-Smith et al., 2018; Reilly et al., 2012). Collaborative stations, standing desk options, and activities that encourage hand-eye coordination energize the learning experience and allow students to experience the physical space of the classroom from multiple perspectives and dimensions. Hallways are often underutilized spaces for learning and movement. These single-file sanctuaries provide extra floor and wall space for project-based learning and learning activities that involve physical movement. They can also serve as an alternative seating option for students who need a break from whole-class stimulation. Rather than thinking of the hallway as a separate space where kids go to get in trouble or waste time, teachers can begin to think of the hallway as an extension of their classroom, one that provides more learning space and opportunities.

Just as important as the various spaces used for learning are the times and spaces used for students to reset and recharge. Recess and other physical breaks during the day help students get moving, stay regulated, and develop social-emotional and problem-solving skills (London, 2015). It is important that we protect the "free play" element of recess, and also provide enough structure to ensure that all students are included and have a positive experience. Teachers should play an active role during recess and other breaks during the day, rather than thinking of their job as passive supervisors, solely focused on safety. These breaks provide a great opportunity for teachers to have meaningful conversations with students in an effort to make stronger connections. They are also a great time to help students strengthen their connections with each other and improve their conflict-resolution skills. Ideally, teachers participate in the occasional game of four-square or challenge the lonely kid to a game of one-on-one, thus modeling the many benefits of recess.

The physical movement aspect of recess and other breaks, such as SPARK breaks (Ratey, 2008), directly supports students' academic and social-emotional growth. Once thought of as two separate things, research on embodied cognition has shown the essential, integrated relationship between the human body and mind. Studies have shown that aerobic exercise specifically impacts executive functioning more than other cognitive processes (Chandler et al. 2018). Executive functioning includes skills such as reasoning, attention, emotional control, and time management, all of which are necessary for students to engage in both academic and social-emotional learning. By getting our students out of their seats and active during the day, both during class and during breaks, we are helping them grow in many important ways.

Extending the Classroom Into the Community

Reimagining the aesthetics of schools and redefining the classroom de-institutionalizes and diversifies the educational experience, but these changes do not provide students with practical and experiential examples of abstract classroom concepts. Nor do they introduce students to the professional, demographic, and environmental diversity of their community. For that, we need to extend the classroom outside the physical walls of the school building and go beyond the linear teacher-student pedagogical exchange. We must treat the community as the classroom and community members as teachers. By expanding the physical space of our schools into the greater community, our students receive more opportunities for academic and emotional growth and gain valuable perspective that transcends their school experience.

For example, social studies teachers can stress the importance of understanding and participating in local politics in a classroom setting, but this is less impactful than meeting with a local politician, attending a town hall, or visiting a state Capitol. By converting the abstract local politician into a real person and letting students listen to politically engaged citizens, we create political engagement through real life experiences.

Similarly, students that engage in service learning at an elder care facility learn to be helpful community members and are exposed to diversity, which in turn may contextualize their own experiences. According to the Partnership for 21st Century Skills, a group of major businesses and education organizations, “The education system faces irrelevance unless we bridge the gap between how students live and how they learn” (Partnership for 21st Century Skills, 2002). In other words, students need practical real world examples and experiences. Consequently, these practical interactions help facilitate their emotional and academic development, fulfilling the mission of education.

Many scholars have outlined the benefits of community engagement and service learning. Students are more motivated, become more invested in their communities, and gain beneficial nonacademic skills (Deans 2000; Bryk et al., 2010; McLeod, 2017). Service learning also cultivates better academic outcomes (RMC Research Corporation, 2007; Billig, Root, & Jesse, 2005). Moreover, increasing community engagement and adding an ethical reasoning component has been shown to improve students’ sociomoral awareness and their willingness to think ethically during decision-making processes (Leming, 2001). Community engagement also provides opportunities to expose students to diverse people, traditions, and perspectives. When we break the barrier between the classroom and the community, we teach students that education is not confined to the physical spaces of the school building and encourage them to treat their community as a laboratory for learning.

The community benefits too. Redefining the community as a classroom encourages community members, organizations, and parents to become active participants in the educational development of children. It creates more teacher-parent collaboration, a better understanding of curricula, avenues for local fundraising, and the potential for the school to become a community center. Another subtle yet potent benefit of increasing community engagement is that we give our students opportunities to share their knowledge. We so often focus on pedagogy, but how often do we think about andragogy? When students become teachers, they offer increased awareness and understanding of youth culture, slang, fads, and novel technology. Adults, in turn, become better equipped to deal with future societal changes when they are already familiar with the social, cultural, and technical milieu of the younger generations. How many of our intergenerational family gatherings feature moments when the teenager is called on to teach grandma how to save a contact, FaceTime, or screenshot something from social media? Students are better at navigating and utilizing evolving technology than older generations, and this dexterity makes them effective digital translators. They are able to teach adults the meaning of an emoji, inform them about changes in the media landscape, and educate them about the implications and applications of emerging AI technologies. Student-driven andragogy is vital to maintaining economically and socially adaptive communities. Bringing the classroom to the community and the community to the classroom is a mutually beneficial exercise. The students benefit from service learning and community engagement, while the community becomes more involved by supporting and educating future citizens.

Conclusion

There is no shortage of conversation about the importance of improving education, and there are plenty of different perspectives about the best way to do this. It makes sense to start with the physical school space and to rethink the ways we can intentionally and meaningfully use our learning spaces to best serve our school communities. One way is by creating school spaces that are aesthetically designed to enhance the emotional wellbeing of students and teachers. This effort communicates a powerful message to all members of the school community, showing students, teachers, and families that we value the important work that occurs in our schools. We can also change the way we define and use learning spaces by creating outdoor classrooms, utilizing other interior spaces, and encouraging physical movement. Service learning and community engagement enable us to use our localities as learning spaces, thereby extending the classroom experience beyond the confines of school buildings and property. It is imperative that all of these efforts are done to work towards what we truly believe school should be, which is a place designed to improve the academic and emotional wellbeing of students.

References

- Al-Ayash, A., Green-Armytage, P., Kane, R., & Smith, D. (2015). The influence of color on student emotion, heart rate, and performance in learning environments. *Color Research and Application*, 1-10. DOI 10.1002/col.21949
- Billig, S., Root, S., & Jesse, D. (2005). The relationship between the quality indicators of service-learning and student outcomes: Testing professional wisdom. *Advances in Service-Learning Research: Improving Service-Learning Practice: Research on Models to Enhance Impacts*, 97–115.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing Schools for Improvement: Lessons from Chicago*. University of Chicago Press.

- Burnett, V. (2021). Middle School Students' Perceptions of Outdoor Classrooms for Science Learning. The University of Missouri- Columbia.
- Chandler, P., Loyens, S., Mavilidi, M., Okely, A., Paas, F., Ruiters, M., and Schmidt, M. (2018). A narrative review of school-based physical activity for enhancing cognition and learning: The importance of relevancy and integration. *Frontiers in Psychology*, 9,
- Connell, J., & Klem, A. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273.
- Daly-Smith, A. J., Zwolinsky, S., McKenna, J., Tomporowski, P. D., Defeyter, M. A., & Manley, A. (2018). Systematic review of acute physically active learning and classroom movement breaks on children's physical activity, cognition, academic performance and classroom behaviour: Understanding critical design features. *BMJ Open Sport & Exercise Medicine*, 4(1).
- Davies, R., & Hamilton, P. (2018). Assessing Learning in the Early Years' Outdoor Classroom: Examining Challenges in Practice. *Education 3-13*, 46(1), 117-129.
- Deans, T. (2000). *Writing partnerships: Service-learning in composition*. Urbana, IL: National Council of Teachers of English.
- Elliott, A. (2015). Color and psychological functioning: A review of theoretical and empirical work. *Frontiers in Psychology*, 6.
- Fisher, A., Godwin, K., & Seltman, H. (2014). Visual environment, attention allocation, and learning in young children: When too much of a good thing may be bad. *Psychological Science*, 25(7), <https://doi.org/10.1177/0956797614533801>
- Francis, C. (1997). Particular places: School environments over time. In S. Stine (Ed.), *Landscapes for Learning: Creating Outdoor Environments for Children and Youth*, (pp. 45-87). John Wiley & Sons, Inc., New York.
- Guardino, C., Hall, K. W., Largo-Wight, E., & Hubbuch, C. (2019). Teacher and student perceptions of an outdoor classroom. *Journal of Outdoor and Environmental Education*, 22(2), 113-126.
- Immordino-Yang, M.H. (2015). *Emotions, Learning and the Brain: Exploring the educational implications of affective neuroscience*. New York: W.W. Norton & Co.
- Kanakri, S., & Morrow, B. (2018). The impact of fluorescent and led lighting on students attitude and behavior in the classroom. *Advances in Pediatric Research* 5(15),1-12.
- Kutsunai, B. 1994. Our garden is a growing place. *Kamehameha J. Educ.* 5:1-10.
- Leming, J. S. (2001). Integrating a structured ethical reflection curriculum into high school community service experiences: Impact on students' sociomoral development. *Adolescence*, 36(141), 33-45.
- London, Rebecca. (2019). *Rethinking Recess: Creating Safe and Inclusive Playtime for All Children in School*. Cambridge: Harvard Education Press.
- McLeod, A. K. (2017). Service Learning and Community Engagement for English Classes. *English Teaching Forum*, 55(3), 20-27.
- Meighan, H. L., & Rubenstein, E. D. (2018). Outdoor Learning into Schools: A Synthesis of Literature. *Career and Technical Education Research*, 43(2), 161-177.
- NYLC. (2008). *K-12 Service-Learning Standards for Quality Practice*.
- Ogita, C., & Pothong, A. (2021). The effects of wall color on students' attention levels: An international school's perspective. *Journal of Student Research*, 10(2), <https://doi.org/10.47611/jsrhrs.v10i2.1418nal-quotes-teach-us-about-life>
- Partnership for Twenty-First Century Skills. (2002). *Learning for the Twenty-First Century: A Report and Mile Guide for Twenty-First Century Skills*. [RetrievedFrom http://www.21stcenturyskills.org/images/stories/otherdocs/P21_Report.pdf]
- PEW Research Center. (2018). Nearly half of post-millennials are racial or ethnic minorities. Pew Research Center's Social & Demographic Trends Project.
- Prentice, M., and G. Robinson. 2010. *Improving student learning outcomes with service learning*. Washington, DC: American Association of Community Colleges.
- Price-Mitchell, M. (2018). Inspirational quotes teach us about life. *Psychology Today*, <https://www.psychologytoday.com/us/blog/the-moment-youth/201811/inspiratio>
- Ratey, J. (2008). *Spark: The revolutionary new science of exercise and the brain*. New York: Little, Brown & Co.
- Reilly, E., Buskist, C., & Gross, M. K. (2012). Movement in the Classroom: Boosting Brain Power, Fighting Obesity. *Kappa Delta Pi Record*, 48(2), 62-66.
- RMC. (2007). *Impacts of Service-Learning on K-12 Participants*. Scotts Valley, CA: Learn and Serve America's National Service-Learning Clearinghouse.
- Sjöblom, P., & Svens, M. (2019). Learning in the Finnish outdoor classroom: Pupils' views. *Journal of Adventure Education and Outdoor Learning*, 19(4), 301-314.
- Stetson, E. 1991. The big green school-house. *Educ. Leadership* 18 (1):34-35
- Stroud Water Research Center. (2021). *A Case Study of the Effects of a School Outdoor Learning Initiative – Spring 2021*. Avondale, PA: Kerlin, S. & Marcum-Dietrich, N.

- Taylor, A. F., & Kuo, F.E. (2008). Is contact with nature for healthy child development? State of evidence. In C. Spencer and M. Blades (Ed.), *Children and Their Environments*, (pp. 124-140) Cambridge University Press, New York
- Waliczek, T. M., Logan, P., & Zajicek, J. M. (2003). Exploring the Impact of Outdoor Environmental Activities on Children Using a Qualitative Text Data Analysis System. *HortTechnology*, 13(4), 684–688.
- Weir, J. (2020). Nurtured by nature. *Monitor on Psychology*, 51(3), 50.
- Wilkins, A., & Winterbottom, M. (2009). Lighting and discomfort in the classroom. *Journal of Environmental Psychology*, 29(1), 63-75.
- Wurtman, R. (1975). The effects of light on the human body. *Scientific American*, 233(1), 68-79.
- Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P., & Gao, Z. (2017). Effects of Physical Activity on Motor Skills and Cognitive Development in Early Childhood: A Systematic Review. *BioMed Research International*, 2017.