

Promoting Holistic and Healing-Centered Solutions in Education

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Abstract

Schools continue to be affected by oppression and inequity which underscore the glaring need for holistic and healing-centered solutions. A critical overview of the educational ecosystem is provided, followed by in-depth attention to holistic improvements in the areas of movement, health, arts and music. *Movement* is emphasized by free-play, recess, physical activity, and sports. *Health* spans the environment, nutrition, nature, green-space, forest schools, diet, food justice, gardening, cooking, and cultural enrichment. *Arts and music* entail visual, performance, and therapeutic opportunities, prevalence, and access. An intertwined representation concludes the analysis with recommendations for policy, research, and practice.

Keywords: *health, healing, education, holistic, movement, nature, play, arts, music*

The educational ecosystem continues to provide opportunity and possibility for holistic development (Ginwright, 2015; 2022), yet as inequities persist, youth increasingly traverse academic barriers, face exclusion, and endure oppression (Au, 2024; Mojitar-Mendieta et al., 2025). These trends may be amplified by mental health prevalence, including anxiety, depression, ADHD, bipolar, autism, and suicide (Haidt, 2024; Maté & Maté, 2022). As debates continue over the so-called improved mental health evaluation criteria that purportedly justifies higher rates of diagnoses (Abdelnour et al., 2022; Hofmann et al., 2021) — minimal attention spans how these diagnoses and pharmaceutical “solutions” — catalyze profits for the corporate elites (Coon et al., 2014; Welch et al., 2012). Mental health

diagnoses are intricately related to special education referrals, observation of student (mis)behavior, and exclusion such as suspension, expulsion, arrest, and referrals to police (Annamma, 2017; Mitchell & Folk-Nagua, 2025). These problems may be (mis)attributed as youth deficits or (mis)diagnoses which may circumvent efforts to understand behavior (Kazda et al., 2021; Macht, 2017). Amid the barriers to academic success and well-being, holistic development and paradigms of healing-justice are overshadowed and underemphasized (Ginwright, 2015; Lea III et al., 2025).

The ongoing focus on youth “behavioral problems” justifies interventions to promote neoliberal skill development, backed by “school

safety” initiatives that benefit corporations (Brendtro et al., 2019; Kupchik, 2016; 2025; Mitchell & Greer, 2024). In misdirected attempts to improve behavior, youth are excluded (e.g., suspension) — although punitive orientations are unevidenced in their effectiveness (Cruz et al., 2021; Okonofua et al., 2016). At the same time, corporate solutions shape reform by employing police and militarizing schools that are already deeply intertwined with military recruiting and school hardening measures which sustain profits for ballistic armor companies (Baumgaertner & Kalman, 2024; Kershner et al., 2022). Schools are sites where youth must be protected, however this rhetoric is used to elevate corporate reform, remove windows, lock doors, and boost armored protection, including bullet proof vests, desks, pencil cases and backpacks (Baumgaertner & Kalman, 2024). Harsh discipline and surveillance leverage fear to perpetuate corporate reform, ultimately reinforcing the trends of criminalization and exclusion (Higdon & Butler, 2024; Kupchik, 2025; Stockman & Nottingham, 2022).

Outside of the school, economic inequities and community disadvantaged affect funding, justify neoliberal reform, with inequities leveraged to close schools and boost for-profit educational opportunities (Diem & Welton, 2022; Lipman, 2013). School problems continue to serve neoliberal entities, where inequities are leveraged as an opportunity to promote charter and private school expansion (Francisco & Burris, 2023). If these trends are ineffective, then new mechanisms of education censorship continue, ranging from attacks on Social-Emotional Learning (Mitchell et al., 2024), anti-DEI trends (Mitchell, 2025), all further advanced by the oppression stemming from President Trump and “America First” policies.

From Oppression to Holistic & Healing-Centered Frameworks

It may be hard to imagine how one could operationalize (or even suggest) a holistic framework amid pervasive mechanisms of oppression. As our opportunities to ensure healing-centered frameworks are supplanted by a need to control youth through antiquated educational trends that fail to recognize their needs, understand their experiences, nor humanize their existence (Knestrict et al., 2021). Rarely do we ask questions such as *what have we done to create such an environment*, where diagnoses continue to increase, orientations to trauma and discrimination drive our thinking, with reform wrapped up in deficit-thinking, dehumanization, obsessions over control, and lack of understanding (Ginwright, 2018; Palma et al., 2023). As oppression and inequity continue, we cannot be bogged down by deficit-driven tendencies (Valencia, 2010) that fail to acknowledge opportunity, hope, possibility, and the avenues to which we can improve these relationships, assets, and well-being (Ginwright, 2022).

The educational ecosystem offers hope and opportunity, especially in thinking about the *possibilities* of what education can become, including the benefits that many continue to receive while others endure dehumanizing experiences (Lewis & Diamond, 2015). Many students are recognized as underachieving, below expectations, and are pathologized, oppressed, criminalized, and excluded through a rigid, one-size-fits-all model of education that fails to provide holistic opportunity (Zhao, 2018). These critiques of the neoliberal school system that orient to surveillance, homogenization, and interact to sustain inequities (Casella, 2018) are also inadequately followed up by scholarly solutions. Solutions often are oriented around *addressing, applying, or imposing interventions* to further regulate the lives of youth (Brendtro et al.,

2019). What is missing is a deep attention toward the development of healthy, holistic, and positive school structures, where resources are abundant, and development aided toward healthy developmental trajectories. Many of the reforms and interventions pursued are also expensive, yet many of the most abundant resources useful for holistic development are all around us.

Theoretical Framework

Holistic worldviews have been around for centuries including human-to-environmental connection and lifelong learning enriched and rooted by Indigenous philosophy (Morcom, 2017). Brendtro and colleagues (2019) add that: “*Native philosophies represent what is perhaps the most effective holistic system of positive youth development ever envisioned. These approaches emerged from cultures where children were scared, and the central purpose of life was to meet their needs.*” Holistic frameworks also have connections to luminary education leaders, such as John Dewey and Rudolf Steiner. Although Dewey rarely spoke of holistic education, he underscored like-minded philosophical emphasis on the mind, body and environment, alongside efforts to boost child-centered, active, and emotional learning opportunities (Hickman, 2009). Steiner also advocated for holistic pursuits, including pedagogical principles aimed at free-play, movement, environmental-rich, creative and nourishing educational components (Nicol & Taplin, 2012). More recently, holistic education has been connected to healing-centered philosophies. For example, Shawn Ginwright offered his framework for healing justice, involving: “...*(1) transforming the institutions and relationships that are causing harm in the first place (Wallace, 2012), (2) collectively healing and building hope*” (Ginwright, 2015, p. 7). This justice-oriented process moves beyond individualistic frameworks, seeking the incorporation of community strengths, promoting

awareness of the deterrent school-based effects that are embedded in racism, oppression, violence, and trauma to facilitate collective action, healing, and well-being. Much of this work has been expanded in Ginwright’s (2022) new book *The Four Pivots*, moving us both inward and outward in transformation to address the lingering effects of racism, trauma, and outlining pathways for collective healing.

Purpose

In an effort to build on a critical focus of school-based inequities, experiences, and augment youth-centered support, a holistic and healing-centered framework is outlined. To do this, the positive dimensions that can aid youth development and well-being are delineated, to nurture relationships through reconnections with nature, non-rigid activities, free-play, and new mechanisms of healthy living, including exercise, diet, music, arts, and cultural enrichment. This review of research incorporates international perspectives but is largely Western, US-based.

Promoting the Dimensions of Holistic Well-Being

The dimensions of holistic-well-being and healing-centered development are delineated amid three overarching categories, (1) movement, (2) health, and (3) arts and music (Figure 1). All of these sections have relevant subthemes, while collectively contributing to the dimensions of physical, emotional, social, spiritual, environment enrichment. These three domains are largely interconnected, with optimal development contingent upon all categories being integrated rather than selectively applied. In each domain, definitions, benefits, modalities for implementation, and limitations to these approaches are outlined. Following these sections, the discussion integrates these shifts in holistic education and highlights areas for future research.

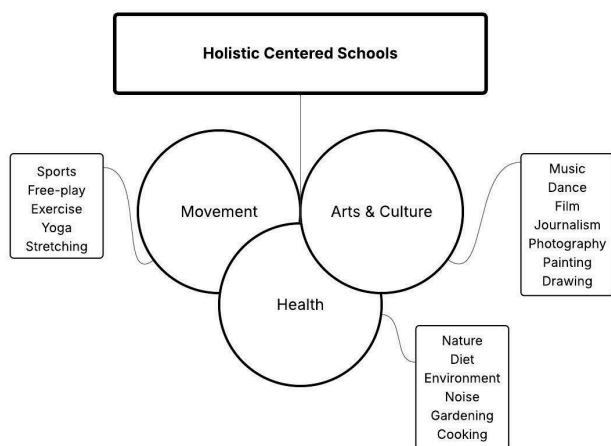


Figure 1. Framework for Holistic and Healing-Centered Schools

Movement

Evidence continues to demonstrate that movement, including free-play, sports-engagement, and physical activity — while offering significant developmental benefits — continues to be suppressed by academic priorities, economic disadvantage that limit opportunities, and lack of prioritization (Savina et al., 2016). While childhood opportunities of movement persist, both socially and culturally it has become devalued and diminished alongside a growing academic focus infiltrating its way into lower grades and pervasive deficit-based trends reinforced by neoliberal ideology (Nicholson et al., 2015; Sims, 2017). While the benefits of movement are multifaceted, schools also provide an ideal time and space to emphasize, teach, and incorporate these enriching benefits to shape improvements in skill development, academic outcomes, mental health, and well-being (Savina, 2024). Movement-based instruction in kindergarten has been shown to boost math and reading achievement through increased agency, choice, and free-play activities (Allee et al., 2024). Integrating movement into classrooms has shown to improve student behavior, well-being, learning, and support teacher management strategies (Moon et al., 2020; Romar et al., 2023).

Movement activity in physical education has been found to improve classroom performance, academic achievement, and prosocial behaviors necessary for reduced disciplinary frameworks (Álvarez-Bueno et al., 2017). School-based movement varies by grade level and geographical region, however, is most often associated with opportunities of free-play, recess, sports, exercise, and physical education.

Free-Play & Recess

Play — although difficult to define — is freely chosen, instinctively motivated, pleasure oriented, and crucial for developmental improvement, well-being, relationship-promotion, and learning (Parrot & Cohen, 2020). Gomes and colleagues (2018) describe play at the intersection of reality and fantasy, crucial for developmental advances in thinking, self-esteem, autonomy and curiosity — underscoring the essentiality for cognitive, physical, social and emotional growth. The importance of play is documented by the relationship between elevated opportunities of unstructured time and behavioral, creative, and problem-solving improvements (Parker et al., 2022; Yogman et al., 2018). Further relevance for play stems from its distinction from academic and outcome-based initiatives (Dickey et al., 2016). The process of being able to self-direct one's enjoyment, engagement, and direction is crucial to the development and success of youth, underscoring why the Centers for Disease Control and Prevention (CDC; 2017) recommends upwards of 20 minutes of recess for elementary school students.

Although free play can and should be encouraged outside of schools (i.e., home; community) the benefits should be cultivated as much as possible throughout childhood. Scheduled opportunities for activity-based learning and play, such as recess, is a time where free-play can be provided to students

to enrich activity-based learning through autonomous, discretionary action (Council On School Health, 2013). In a 2010 Gallup survey of 1,951 principals, 75% reported that students listen better and have improved focusing skills after recess is provided, with nearly all participants noting positive impacts on social development and general well-being (Robert Wood Johnson Foundation, 2010). More recently, Tsai & colleagues (2024) assessed the prevalence of recess across 559 respondent elementary schools, noting nearly 88% provided at least 20 minutes of time dedicated for recess. To support recess success and sustainability, scholars suggest procuring buy-in from key leaders, building student leadership, staff engagement, and improved program integration and communication (London et al., 2025). The benefits of movement associated with both free-play and recess are also found in physical activity and sports-based engagement.

Sports

Consistent with the benefits of movement — sports engagement may enable developmental advancements, improved quality of life, and elevated social, physical, and emotional health outcomes (Vella et al., 2023; Zuckerman et al., 2020). Nery and colleagues (2023) outline three components of sports: movement, play, and competition, noting how rewards and growth stem from connections of mind, body, and attachment — with benefits acquired through social interaction, relationship promotion, and environmental enrichment (i.e., nature). Sports may promote positive mental, physical, and academic benefits, alongside resilience, mental health coping strategies (e.g., anxiety; depression), prosocial behaviors, and avoidance of smoking, alcohol, and fighting (Kuhn, 2021). Participation in sports may elevate well-being (Wilson et al., 2022), belonging, purpose, life-skills (e.g., information processing;

decision-making; Bruner et al., 2023), and educational success, especially if conjoined by a variety of team and sport offerings (Bradley et al., 2013). In a global meta-analysis, Zuckerman and colleagues (2021) revealed health benefits associated with team sport participation, including behavioral (80% of studies), psychological (75%), social (70%), improved mental health (e.g., anxiety; depression), and decreased use of tobacco, alcohol, and drugs.. There is also evidence to suggest that sports may be more useful for children facing movement inhibition, and psychological challenges such as ADHD (Mehren et al., 2020). In addition, medical ailments (e.g., obesity) may benefit from enhanced physical engagement alongside improved sense of belonging, self-improvement, self-monitoring, and free expression (Martín-Rodríguez et al., 2024)

Given the recognized benefits of sports activity throughout childhood, Healthy People 2030 outlined a goal of reaching 63% of youth sports participation (Project Play, 2024). This goal may stimulate efforts to overcome the rising rates of obesity, including 1 in every 5 youth, disproportionately Hispanic, Black, and lower income, amid a 4-fold increase since 1980 (CDC, 2024a; Fryar et al., 2021). Project Play (2024) reported that among youth ages 6-12, rates of sports participation, include: Basketball (14%; 3.9M), Baseball (11%; 3.2M), Soccer (8%; 2.2M), Tennis (6.5%; 2.1M), Golf (6.1%; 1.7M), Flag Football (3.5%, 1M), Gymnastics (3%; 863k), Tackle Football (2.3%; 724k), and Cheerleading (2.2%; 634k). Among youth ages 13-17, the sport's most often accessed were Basketball (16.3%; 3.4M), Baseball (8.7%; 1.8M), Tennis (8.5%; 1.8M), Golf (7.9%; 1.7M), Soccer (7.1%; 1.4M), Tackle Football (6.4%; 1.3M), and Volleyball (5%; 1M). Sports participation is also affected by states and economic factors that net differences in participation by family income, race, and gender. More boys (amid declining

rates) participate in sports versus girls (increased rates). States with highest participation rates are Massachusetts and Minnesota, with the majority of Southern States maintaining less than 50% enrollment. Interestingly, these numbers appear to correlate with state economic factors. In other words, where economic disadvantage increases, obesity rates increase, and participation in youth sports declines (Edin et al., 2024; Project Play, 2024; Robert Wood Johnson Foundation, 2024).

Physical Activity

Opportunities for physiological and psychosocial development can also be achieved through physical activity (Hills et al., 2015). The US Department of Health and Human Services (2016) recommends that youth (ages 6-17) should strive for 60 minutes of moderate-to vigorous-intensity physical activity each day, including aerobic, muscle and bone-strengthening activities. The Physical Activity Alliance (2022) suggests an array of helpful options, including *aerobic* activities (daily) include walking, running, hiking, biking, skateboarding, martial arts, and sports; *muscle-strengthening* activities (3x week) can be accessed through weight-lifting, paying on playground equipment, and tree climbing activities; *bone-strengthening* (3x week) activities may include gymnastics, running, jumping rope, hopscotch, and skipping. Hills and colleagues (2015) remind us that schools play an especially crucial role in setting healthy behavioral patterns many of which can be established through physical activity and may have a lasting impact across the lifespan (CDC, 2024b).

Physical education alongside dedicated activity time may also boost developmental benefits (Draper & Stratton, 2018; Palmer & Bycura, 2014). Standards for physical education are set by Shape America, however states often enact their own standards. Varying by grade level options and physical activity intensity, standards are aimed at:

motor, social, and physical skill development, as well as knowledge of movement and fitness (Shape America, 2024). Pfothenauer (2023) adds that only six states (i.e., Illinois, New York, Hawaii, Massachusetts, Mississippi, Vermont) require physical education for all students. Michael and colleagues (2019) note that physical education policies vary by state and school, directly affecting the low implementation of policies and posing barriers on physical education programs. The Physical Activity Alliance (2022) underscores that schools are generally underprepared and underutilizing activity-based physical education.

Implementation Barriers of Movement-based Education

Although the implementation and sustainability of movement-based education varies by domain, location, race, gender, and dis/ability, a few barriers and takeaways can be illuminated. Opportunities of movement are more easily accessed by higher income families with barriers due to cost and limited opportunities related to sports and physical education offerings (Nery et al., 2023). Among families with incomes over 100k, sports participation is 43% and only 25% for families with income under 25k (Kuhn, 2021). As lower income families are less likely to access sports, they also have lower exercise rates and face lower odds of ever playing sports (Pandya, 2021; Tandon et al., 2021). Questions of affordability continue to be a major concern which may inhibit sports access for lower income households. Affordability is multifaceted, ranging from initial entrance costs to continued use and ongoing investment, with the overall costs of travel depending on the associated sport and team. Thus, children in higher economic backgrounds have more time to play and practice per week, throughout the year, and parents have greater means to support these efforts toward sports specialization (Walker et al., 2021). Participation

by gender is higher for boys (40%; declining) than girls (34%; increasing), and by race/ethnicity, include steady rates for White youth (40%), increasing trends for Asian/Pacific Islander (37%), and declining rates for Black (35%) and Hispanic (34%; Project Play, 2024).

Declines in sports participation was notable prior to the COVID-19 pandemic, however school closures and social distancing may have further impacted rates of participation. From 2019-2022, among youth ages 6-12, enrollment declines were prominent in Cheerleading (-23%), Baseball (-20%), and Gymnastics (-15.6%), amid growth in sports with more opportunities for social distancing, including Tennis (51.2%) and Golf (32.6%). Similar pandemic shifts were noted for youth ages 13-17, including declining participation in Swimming (-33%), Gymnastics (-27%), Cheerleading (-25%), and Baseball (-16%), with participation gains in Tennis (25%) and Golf (49%; Project Play, 2024). Lack of sustained engagement, drop-out, and attrition continues to upend the benefits of movement. Attrition rates may be affected by perceptions, stigma, conflict, norms, attitudes, and behavior amid team sports (Back et al., 2022). Negative attitudes surrounding movement, sports, and physical activity may also affect teachers through internalized aspects of perceived and actualized marginalization (Hills et al., 2015; Spicer & Robinson, 2021). Movement offers widespread health benefits with additional mechanisms to facilitate health-centric opportunities continued in the next section.

Health

Integrating the dimensions of health-oriented education is highlighted in this section amid two overarching categories: environment and nutrition. Emphasis on the environment encapsulates a greater incorporation of naturally occurring benefits such as green spaces and

nature, and the section on nutrition overviews diet, gardening, cooking, and cultural enrichment.

Environment

Health benefits accrue from environmental factors that most of us are surrounded by and are abundantly found in nature, green spaces, and forests (Gebhard et al., 2025). Green space refers to natural vegetation, including grass, shrubs, and trees, more noticeable in places such as public parks and woods. To some extent, meta-analyses have underscored the benefits of nature, including improved mental health and well-being (Tillmann et al., 2018; Lomax et al., 2024). Exposure to nature, natural light, vegetation, and interaction with the environment can spur a host of sensory and physiological benefits through visual, sound, smell, taste, touch, amid non-sensory benefits (e.g., soil and gut microbes; Franco et al., 2017; Islam et al., 2020). Green space is associated with improved emotional and behavioral health outcomes, reduced hyperactivity, improved attention, overall mental health functionality, and reduced anxiety, depression, and introversion (Barton & Rogerson, 2017; Feng et al., 2022; Vanaken & Danckaerts, 2018).

Time in nature can help ground one in the present moment (Medeiros et al., 2022), shape holistic benefits, and can be achieved through a variety of opportunities in school, community, and wilderness educational settings. Liu and colleagues (2021) delineate the list of physiological and psychological effects of nature exposure by studying variations on forest settings (i.e., mixed; deciduous; coniferous) and the restorative effects across all settings, including reduced heart rate, blood pressure, negative emotions, while raising positive dimensions of mental health. The strongest effects were found in mixed forest settings, potentially due to increased vegetation, colors, and plant diversity. Nature complexity may stimulate a focal awareness to the

present environment, thus improving positive feelings by reducing stress and mental fatigue (Liu et al., 2021; Maes et al., 2021; Stigsdotter et al. 2017). Many studies focus on visual and auditory relationships of nature and health, however there are also under-acknowledged links between the sense of smell (i.e., olfactory) and well-being (Bentley et al., 2023).

The benefits of nature and greenspaces – may be most pronounced due to the abundance of sensory experiences that occur in these environments. The relationship between improved metabolic health and olfactory system have been increasingly studied, noting benefits such as cognitive, behavioral, emotional, memory formation, thinking, processing, stress reduction, dietary choice, and anti-inflammatory outcomes related to reduced symptomology for autoimmune conditions (Bentley et al., 2023; Bratman et al., 2024). Western cultures often deemphasize consideration of the olfactory system (i.e., sense of smell), while these fragrant sensory ecologies are still highly valued and incorporated for healing purposes in Indigenous communities (Daly, 2024). The benefits of the olfactory system are more often recognized during a state of decline. In other words, well-being and quality of life has been found to decrease alongside olfactory damage or weakening with age (Boesveldt & Parma, 2021).

The benefits of smell are underscored by several divergent areas of research, including treating stress through aromatherapy (Chang & Shen, 2011), sensory gardens to support youth with special educational needs (Hussein, 2012), adults living with dementia (Gonzalez & Kirkevold, 2013), and treatment for Alzheimer’s disease (Kaplan, 2018; Smith & D’Amico, 2020; Smith et al., 2020). Other sensory benefits associated with the mixed environment associated with sound, taste, and touch — with these sensory benefits discussed in greater detail in the next section on

arts and music preceded by an additional look at nature-based educational offerings.

Forest Schools

A contemporary model of holistic-driven schools is encapsulated by forest school frameworks. Transforming deficit-driven discourses into strength forward environments — forest schools emphasize nature-based learning that is self-directed, play-based, absent of overly constrained outcomes and goals, and limited oversight in developmentally rich spaces (McCree, 2019). Youth can self-direct their social and emotional growth, promote well-being, confidence, calmness through salient rich ecological systems (Davenport, 2019; Sackville-Ford & Davenport, 2019). In a 12-week forest school program, a host of benefits for youth accrued related to improved cooperation, happiness, calmness, and feeling less tired and bored compared to children in the traditional classroom (Hepworth et al., 2024). Outdoor learning — emphasized in forest schools — provides an in-depth opportunity for independence, freedom, reconnection with nature, and new learning opportunities for both teachers and youth (Harris, 2018).

As the benefits of forest schools continue to be documented, and their prevalence grows — it is important to acknowledge some potential challenges. Leather (2018) highlights the potential disconnection of theory to practice (i.e., rhetoric v. reality), where buy-in waivers and educator understanding of free-play in forest environments may be poorly understood. These factors hold with some of the larger neoliberal concerns, with corporate-based solutions and efforts to commodify youth development consistently competing for control over the influx of the holistic movement (Leather, 2018). Waite & Goodenough (2018) highlight the importance of grounding these efforts in culturally-responsive,

student-centered spaces where youth are provided an opportunity to be active and explore their outdoor environments in the context of highly qualified and trained practitioners.

Nutrition

Building on the benefits of nature-driven education, schools can also emphasize nutrition, diet, and health. Amid standards-based reform over the last decade, access to healthier food options have taken shape, although significant limitations and inconsistencies persist (Merlo et al., 2023). Federal programs offer financial reimbursement support for school meals, including the School Breakfast Program and US Department of Agriculture's National School Lunch Program. 15 million children across 91,000 schools participate in the breakfast program and 30 million children in 97,000 schools utilize lunch programs (USDA, 2020). Despite these figures, approximately 18% of youth skip breakfast each day (Brener et al., 2024), posing barriers on the positive associations between breakfast consumption, behavior, health, and academics (Basch, 2011; Sliwa et al., 2024). Yet, boosting nutritional programs and school meal quality offerings is not as simple as merely providing more accessible, reduced cost services.

Social stigma surrounding free/reduced cost meals may impose barriers on food inclusivity, underscoring the need for universal school-wide food programs where students do not feel singled out and can participate without fear of repercussion, shame, or embarrassment (Cohen et al., 2023). Currently 8 states (previously 9; California, Colorado, Maine, Massachusetts, Michigan, Minnesota, New Mexico, and Vermont) have legislation to support the expansion of universal meal programs (Spill et al., 2024), with Nevada ending their program in 2034-24 (Hernandez, 2024). Despite this progress, still 40% of children opt out of lunch programs and

instead bring lunch from home, often due to the benefits of reduced cost potentially caused by a lack of information regarding free and reduced lunch costs (Song et al., 2024). In a systematic review, lunches brought from home frequently contained snacks, sweets, sugar beverages, higher carbohydrates and fat, while being lower in calcium, protein, iron, fiber, and vitamin A, and less nutritious overall (Song et al., 2024). Efforts to enhance meal participation that are evidenced by universal free school meal programs (Cohen et al., 2021; Toosi, 2024) can also be supported through school-wide nutritional programs.

As economic disadvantage, inequality (Edin et al., 2023) and the climate disaster intensify (Fraser, 2023), the need for climate justice frameworks have increased (Trott et al., 2023), including shifts in environmental education, food (in)security and literacy, gardening and cooking (Milks et al., 2024). School gardens have increased in popularity and prevalence over the past 20 years (Landry et al., 2021), resulting in social and emotional growth opportunities and improvements (Lohr, 2020), dietary regulation through increased fruit and vegetable intake (Savoie-Roskos et al., 2017), enhanced relationships with nature, food literacy gains (Lam et al., 2019), reduced metabolic and obesity risk (Gatto et al., 2017), and health-centric cooking habits (Davis et al., 2016; van Wijk et al., 2024). The benefits of environmental-based and food-centered programs extend beyond individual benefits and may build community initiatives through emphasis on local food systems, sustainability, and critical food literacy skills (Holland et al., 2023). The green school movement offers promise for environmental transformation, especially given the rising prevalence of use in schools (~9-12%) incorporating green school programming (Plevyak, 2022).

Building on nutritional and environmentally oriented educational opportunities, schools in some areas have connected gardens to cooking and community-engagement. Cooking is associated with a host of benefits, including the prevention of disease and obesity, improvements in healthy food preferences, and positive attitudes, behaviors, and orientations to food (Caraher et al., 2010; Hersch et al., 2014; Sullivan et al., 2025; van der Horst et al., 2024). Youth are able to thrive in environments where hands-on, experiential learning permeates through rich experiences that develop life-skills (Kempler et al., 2025). Educational opportunities that develop cooking skills also provide an opportunity to build cultural enrichment, whereby cooking classes can be oriented around diverse cultures, geographic variation, and food study courses that teach regional spice variations, techniques, and diverse representation (Corbin et al., 2025). Cooking-based learning components can inspire a love for food and diverse cultural enrichment, however barriers to implementation persist.

Implementation Barriers to Health-Centric Education

Given the breadth of environmental benefits, it is necessary to highlight the lack of equal distribution and access to green space (Lee, 2025). For example, white and economically advantaged people maintain disproportionate access to green spaces and closer park proximity (Rigolon, 2017). Experiences of green space exclusion are also associated with segregation, sense of belonging, and negatively affect park goers from marginalized backgrounds (Byrne, 2012; Kephart, 2022; Mehta & Mahato, 2021). Thus, the communities and youth most in need of eco-benefits, are more likely to experience environments with less green space, higher rates of urbanization, pollution, noise, construction, alongside increased stress, disease prevalence, and diminished well-being (Larson et al., 2016;

Stokols, 2018). In light of the longitudinal economic, health, and education inequalities, it may be that holistic or ecological benefits may have diminished benefits for populations disproportionately affected by racism, discrimination, and inequity (Hart et al., 2025). However, this does not mean we should dismiss the utility of holistic frameworks but work to conjoin these efforts with corollary attention toward abolishing inequities in society and schools (Mitchell & Folk-Nagua, 2025).

In addition to the concerns related to unequal access to green space, the way in which individuals engage with green space plays a crucial role in the quality of outcomes. Richardson et al. (2021) note that time spent in nature may be less important than procuring aspects of connectedness and activity-based engagement. In other words, to optimize mental health and well-being through nature-based engagement, it is our orientations to these environments and the quality of how time is spent that appear most important to reaping the benefits (Dagher & Hadfield, 2024; Richardson et al., 2019; Wood et al., 2025).

These efforts toward holistic procurement and inequity targeting action, help to underscore the enhanced need for community-based efforts. The influx of gardening, cooking, and cultural enrichment in schools cannot be separated from community-based work that recognizes and aims to understand food apartheid issues, uproot food scarcity, build food literacy, and promote educational shifts in conjunction with community input (King et al., 2025). For instance, supporting educational shifts in food literacy without recognizing the local prevalence of food inequities, presence of fast-food restaurants, scope of quality grocery stores, access to farmer's markets, may be insufficient to procure change (Gripper et al., 2022). Joyner and colleagues (2023) underscore the importance of urban

agriculture, food sovereignty, and attention to zoning policy needed to overcome the limited healthy food options. Schools can partner with these shifts toward food justice by addressing educational gaps, building food opportunities in gardening, growth, cooking, and community sustainability, useful for skill development and community resilience (Harper et al., 2017; Nocella et al., 2017).

Arts & Music

Enhancing the holistic emphasis on movement and health are necessary extensions of art and music-based education. Arts and music comprise a variety of disciplines and creative opportunities, ranging from *visual* (e.g., sculpting; painting; drawing), *digital* (e.g., photography; film; design), *performance* (e.g., theatre, dance, music), and *therapy*. It is beyond the scope of this paper to detail all of the arts-based opportunities, however it is important to note the wide range of possibilities. Arts-based education is associated with a host of benefits, including academic, behavior, creativity, cognitive, social-emotional, awareness, knowledge, self-expression, and cultural development (Bowen & Kisida, 2023; Eddy et al., 2021; Egana-delSol, 2023; Moar et al., 2024; Palmer & Booth, 2024; Walton, 2024). These benefits can be achieved *individually* such as through memory enhancement, neuroplastic adaptation and growth (Collins, 2014), and *collectively* through holistic, healing, and reciprocal benefits through schools and community connection (Hess, 2019).

Enrollment in arts-based education is highest in music (49%) and visual arts (49%), followed by theater (5%) and dance (3%) programs (Morrison et al., 2022). Early engagement in arts is associated with sustained arts engagement into adulthood (Elpus, 2017), therefore the gains accrued during adolescence can support long-term benefits such as the prevention of cognitive

decline (Petrovsky et al., 2025). Large, suburban, resource-rich, and schools with more white youth typically provide music instruction opportunities in higher prevalence (Elpus, 2017). Shaw (2021a) adds that the application of music programs may not be universally beneficially, nor are course offerings equally provided. Longitudinal research on arts and achievement has found that socially and economically disadvantaged and “at risk” categorized youth may be most likely to benefit from arts-based curriculum offerings, although benefits for more affluent youth may also occur (Catterall, 2012). Creative-arts therapies (Frydman et al., 2021), critical music therapies (Baines, 2021) and visual art therapies (Losinski et al., 2016) have been increasingly linked to psychosocial and behavioral improvements (Frydman et al., 2021; Sacks, 2008; Scrine, 2021). For an extended example, hip-hop-based education is reviewed.

Hip-Hop Based Education

An extension of arts and music-based education is hip-hop based education. Hip-hop emerged in the 1970s, expanded in popularity through the 1980s and 90s, and during this time, came to be recognized with rising pedagogical utility (Baker, 1993; Hall, 2009). Ford and colleagues (2025) highlight the cultural benefits of hip-hop as a holistic catalyst for inspiration, motivation, and educational growth. Hip hop-based education is critically oriented, inclusive, and emphasizes the lived experiences of learners by incorporating their tacit knowledge that shapes and surrounds child-development (Love, 2015). Building upon situated learning, hip-hop based education supports the social processes that are instrumental to child learning experiences (Love, 2015). The pedagogy facilitates the elements of music, rap, language, dancing, fashion, and knowledge to learn, grow, and think critically. Hip hop-based education produces a culturally sustaining practice that supports students through relationship

promotion, enjoyment, and empowerment (Ladson-Billings, 2014). Further, the utility of hip-hop-based education is facilitated through an emphasis on community and student expertise, allowing students to thrive and enjoy school through active engagement (Irby & Hall, 2011). It is a rapidly evolving and growing pedagogy with educators often excited about the enjoyment and cognitive stimulation that children derive from this inclusive pedagogy (Love, 2015).

The benefits of hip-hop based education include positive effects on student learning, attention, agency, and critical thinking skills that stem from the benefits of sensory-driven, active-based learning (Ling et al., 2025). The accrued benefits of hip-hop education extend from the interaction of hip-hop performance with oral, aural, visual, mental, and physical dimensions, with integration spanning all educational levels from early childhood to college (Ford et al., 2025; Love, 2015). The action-oriented and in-depth nature of hip-hop may serve as a fodder for emotional, intellectual, and academic growth, while allowing space for youth to process and navigate the environment through critical, curious, inclusive, and engaging standpoints (Irby & Hall, 2011; Laforgue-Bullido et al., 2024). These benefits underscore the cultural relevance, the natural development of social and political participation, and the increased opportunity for relationship promotion between youth and teachers (Laforgue-Bullido et al., 2024). In spite of these potential benefits, scholarship and validated studies are still emerging, including limited global development (Crooke et al., 2020). The benefits of arts-based curriculum such as hip-hop based education are challenged by funding inequities and declining arts-based education.

Implementation Barriers to Arts-Based Education

The American Academy of Arts and Sciences (2024) highlights that arts-based education has been on the decline for three decades. These trends disproportionately affect minoritized communities, with school size the strongest predictor of arts and music-based education in US high schools (Elpus, 2020). Participation in at least one arts-based course has been shown to decline as students' progress through elementary (86%), middle (69%), and high (47%) schools. This results in over two million projected students without access to arts-based educational programs (Morrison et al., 2022). Funding cuts, program rollbacks, decreased interest stemming from educational inequities and growing challenges related to the perceived lack of applicability and benefits may impose barriers to arts-based education (Major, 2013). The barriers are varied by public and charter education, with Deangelis (2025) noting that charters enroll a higher percentage of youth of color yet typically provide fewer music courses that are then staffed by educators with less training (Elpus, 2022; Shaw, 2021b). Similar to other areas, neoliberal reform has siphoned attention away from arts-based education (Chappell & Cahnmann-Taylor, 2013). Yet, it is important to reiterate that arts and music can establish culturally responsive, affirming, inclusive, and holistic support for youth (Prest & Goble, 2021).

Discussion

A critical overview of the educational ecosystem was provided before highlighting the dimensions of holistic well-being, including movement, health, arts and music (Figure 1). These domains should not be thought of as individual mechanisms aimed at school improvements, but as a collective system of change and re-alignment toward healing-centered frameworks. Holistic and healing paradigms emphasize interconnectedness through recognition that movement is connected to health, nutrition, and environment, just as it

relates to arts-based education. The most effective approach may be to support improvements across all domains, alongside a structural attention to community and school-based inequities — as healing is more likely to occur when needs are met and holistic mechanisms buttress this pursuit (Maté & Maté, 2022).

It may be argued that suggestions outlined in this manuscript are not typical aspects of curricula and that schools are challenged by high student need, resource deficiencies, and constraints that pose barriers to these endeavors. Yu et al. (2022) remind us that given the increased amount of time that youth spend at school — these environments are a great opportunity to implement active, experiential-based learning, playing, and socialization. Also, it may be argued that some of these aforementioned holistic components are already taking place in schools, such as in the case of Social-Emotional Learning (SEL). Not to dismiss the potential benefits of SEL, but to highlight the distinctiveness of a truly holistic approach that circumvents deficit-based ideology through mechanisms that cultivate, build assets, nurture, promote relationships, and connection to environment and humanity. This deeper recognition underscores how promoting individual skill development (e.g., SEL) at the expense of structural change and holistic development, may be ineffective and potentially harmful (Clark et al., 2022; Mitchell et al., 2024). Rather than implementing SEL-based interventions, holistic education emphasized in movement, health, and arts-based education — all have capacity to cultivate social and emotional growth (Barton & Rogerson, 2017; Feng et al., 2022; Gomes et al., 2018; Hess, 2019; Lohr, 2020; Vella et al., 2023). Thus, we can promote opportunities for social and emotional growth in *naturally* occurring environments that circumvent a deficit-driven maintenance on school-based interventions (Mitchell & Folk-Nagua, 2025).

Shifting our attention to holistic education means we begin with the importance of relationships, community, connection, and awareness. These avenues should not be positioned as a recipe for leveraging academic skill development, but rather to spur connectedness, purpose, belonging, and relational-trust (Brendtro et al., 2019). What would it look like to truly design systems to improve well-being and social connection, rather than a myopic focus on academic achievement and test scores? Holistic and healing centered frameworks can be a solution to address the rigid neoliberal environment that sustains individualism, isolation, and suppresses relationships. Through movement, engagement, community and environmental connection, holistic frameworks build attention to the structural inequities, while being uniquely positioned to tap into youth assets, inspire curiosity, and provide active-based learning experience to nurture opportunities to address global problems (Miseliunaite et al., 2022). This is not a movement to procure individual skill development, but to re-align schools toward mechanisms that promote humanity, relationships, community well-being, sustainability, and attention to overcome structural inequities and global crises (Plevyak, 2022). At present, many schools are positioned in ways that fail to procure civic engagement, oppressing youth through rigid one-size-fits-all frameworks, maintaining allegiance to corporations at the expense of working-class people (Ross, 2017; Zhao, 2018). The shift emphasized is beyond simply addressing needs of youth and toward building rich-learning environments where experiential learning, environmental promotion, and community-driven education are pathways to relationship-promotion, school engagement, and developmental well-being.

Limitations and Perspectives

To advance the theoretical footing of holistic and healing-based frameworks, there are several limitations and dominant perspective frames that are important to situate. First, the bulk of manuscript comprises Western-based, US-centric research. This is not to say the research is not valuable, but that limitations as far as generalizability are important to acknowledge, amid the cultural uniqueness of the US. Caution is urged with regard to the transferring of knowledge to other nation-states and cultures. Second, the positioning “arts” and “music” in distinct, albeit overlapping categories, was an intentional frame intending to recognize the vast utility of music in a way that does not diminish or overshadow this importance through an arts-centric frame. Given the utility of both “arts” and “music” — these domains are independently explicated, to make clear the multifaceted benefits and dimensions of each area. Finally, it is important to acknowledge the complexity across all of the varied definitions of holistic education. In this manuscript, it has been argued that holistic education comprises the dimensions of movement, health, arts and music, yet this is a non-exhaustive review, and may not fully represent all components of holistic and healing-based education. Further, it is suggested that these considerations be further evaluated with educators, families, scholars, and youth.

Recommendations and Calls for Future Research

To procure a sustained shift to holistic and healing based schools, **recommendation one** entails making holistic education a fundamental component of the educational ecosystem. Rather than continuing to emphasize individual aspects of movement, play, environment, green spaces, arts, music — all of these domains should exist within one interconnected model of education. That is, holistic education should be a basic component that is equally provided, but distinct from the corollary goals of academic

achievement. To do this, we can re-imagine ways to integrate these domains into preexisting curricula, or devise entirely new educational offerings to boost holistic and healing-based components into schools. For example, research and evaluation should examine the extent to which these holistic components — movement, health, arts, and music — are integrated within communities, schools, and classrooms. These shifts can be supported by deepened connections with youth to understand their experiences and optimize transformative reform (Radina & Schwartz, 2019).

Toward a more piecemeal fashion of holistic implementation, **recommendation two** entails the promotion of experimental-based learning throughout all courses as a means to operationalize holistic and healing based components. With this in mind, we can do more to integrate these dimensions into traditional coursework, where science class is transformed into a living and breathing engagement with movement, nature, and the environment. For example, social studies can be re-imagined by deeper attention to ecological challenges, orientations to climate-justice, and community connection. The ideas and opportunities for educational enrichment are endless.

Recommendation three is focused on building partners in advocacy, including community-based leaders, agencies, nonprofits, to recognize the strengths and ongoing action that exists, in order to reduce the overall burden on the school system. For example, in what ways can schools partner with community gardens, wild-life sanctuaries, and climate justice activists. In other words, when schools may be limited in their ability to develop initiatives (e.g., school gardens; cooking-based education) community organizations and activists can help to fill the curriculum gap. These efforts can build on local assets, enhance relationships,

and amplify relationships between the community, families and schools.

Recommendation four aims to incorporate youth perspectives into these holistic shifts. Youth may be inspired by these opportunities away from academic rigidity, and it is important to tap into their agency and excitement to build support for these new educational offerings. Youth can be stewards of guidance, suggesting ideas of movement integration in coursework, or new avenues of arts and music-based learning. School-based shifts must be supported by youth, for the benefit of youth, not for some supplemental goal or academic outcome.

Many holistic trends may already be taking place in private spaces, such as Reggio-Emilia, Montessori, and Waldorf schools, therefore **recommendation five** recognizes that we should learn from these environments to understand what is transferable to public education. The benefits of holistic education should not be a privilege of the wealthy, but a right to everyone.

Once changes have been inspired, **recommendation six** underscores the fact that more research is always needed, to document the evidence of effectiveness, the perspectives of youth, the insight of school-based professionals, then moving to advocacy at school boards, alongside efforts toward policy change across the school, district, and state levels.

Conclusion

At present, schools are ripe with inequity, oppression, and critical injustices, therefore promoting holistic frameworks should not be positioned as a solution to inequality, but a pathway for humanity. In the preceding pages, the educational emphasis on holistic frameworks were outlined to document benefits and the need for structural shifts. Crucial for developmental improvements and nurturing frameworks are

renewed attention to movement, play, physical activity, sports, health, nutrition, environment, nature, community gardens, cooking, cultural enrichment, arts and music. Re-aligning schools to allow youth to self-direct their learning, participate in active and experiential education that is useful for relationships, well-being, and community enrichment. These are the shifts needed to advocate against the rising neoliberal school, to educate around injustice, build agency, autonomy, and capacity for youth to shape collective change to address serious global consequences. Schools, teachers, communities, and the youth they nurture will thrive in environments where they are valued and provided space to develop naturally beyond rigid, structured, academic-laced paradigms.

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