Integrating the Guiding Principles of Whole Child Design

Developmental and learning science provides us with optimism about what all young people are capable of. The contexts and relationships they are exposed to influence what they learn and who they become. Today, we can use the Guiding Principles for Equitable Whole Child Design to build classrooms, schools, and learning settings that enable children to develop, learn, and thrive. By designing schools that integrate its five elements, we can help youth build resilience and knowledge; develop their interests, identities, and passions; and grow the skills, habits, and mindsets they need to live lives of fulfillment.



Guiding Principles for Equitable Whole Child Design

Schools can adopt key structures and practices that nurture each design principle individually, but the most powerful application of these components will be to use them in reinforcing and integrated ways to truly support learner needs, interest, talents, voice, and agency. The aim is a context for development that is greater than the sum of its parts and is transformative, personalized, empowering, and culturally affirming for each student.

Positive Developmental Relationships

Positive developmental relationships provide the foundation for student learning, development, and well-being and can support all members of a school community. When relationships that are reciprocal, attuned, culturally responsive, and trustful flourish in learning settings, they can enable youth to grow their agency and confidence and become more able to learn skills, perform tasks, and take on new challenges. A strong web of mutually supportive relationships between and among students, families, and staff helps all members of the community thrive and can even buffer the impact of stress to support learning and growth. Schools can be organized to foster relationships through structures and practices that build community and allow for effective caring, including those that do the following:

Personalize Relationships With Students: Continuity and consistency, as well as trust, respect, and valuing student identities, are key principles in building positive relationships with students. Effective structures that create time and space to build responsive and attuned relationships include:

- **looping**, which allows educators to be with the same children for more than 1 year;
- **advisory systems**, which create small family units within schools that provide each student with a home base, a caring community, and an adult advocate;
- **teaching teams**, which share a group of students, codevelop a coherent curriculum, and work jointly to support students' individual needs;
- **block scheduling**, which creates more time for teachers to collaborate and build relationships with a smaller number of students;
- **longer grade spans**, which allow for closer, longer-term relationships and smoother school transitions; and
- **small school size and/or small learning communities** that allow students to be well known and allow educators within the school to share norms and practices.

These personalizing structures are most effective when they are culturally affirming and joined with practices that build positive school culture, community, and trust.

Support Relationships Among Staff: School staff are more effective in settings where they have opportunities to collaborate with and learn from one another. In addition, student culture follows staff culture, making it important for adults to embody the compassion, respect, growth mindset, and inclusiveness that we hope students will develop and convey. Structures that support the development of productive relationships among staff include:

- **collaboration planning time for** teachers in grade-level and/or content teaching teams that enables staff to plan curriculum, address problems of practice, build trust, and ensure students do not fall through the cracks; and
- **opportunities for shared learning, relationship-building, and decision-making** including distributed leadership, staff meetings, events, rituals, and retreats for caring, communication, and collaborative school design that fosters school coherence.

Collaboration and professional learning among staff can be used to build shared teaching expertise, relational skills, and culturally responsive mindsets and teaching practices.

Build Relationships With Families: Family engagement provides opportunities for deeper knowledge of youth and greater alignment between home and school, increasing academic outcomes for students across all grade levels. Schools can cultivate these partnerships by developing structures that support school–family relations as part of the core approach to education. These can include:

- tools for outreach and positive, regular communication to actively engage families as partners, such as positive phone calls home, informational emails, and web access to student events and assignments;
- **student-teacher-family conferences** that are scheduled around families' availability and engage families in their students' learning; and
- **dedicated time and resources for home visits**—virtual or in person—which can allow for proactive, intentional interactions with families and enable educators and families to learn about and from one another.

Families from diverse backgrounds are more successfully engaged as partners when schools embrace shared responsibility and culturally and linguistically responsive orientations that communicate care, respect, and the importance of family expertise.

Environments Filled With Safety and Belonging

The contexts for development, including schools and classrooms, influence learning. The environment sets the tone through its physical features as well as how time and space are consistently used and how relationships and experiences are created. Contexts send messages about the value placed on students and staff. What is important or unimportant, what is rewarded or sanctioned, who is powerful or powerless, and who is viewed as trustworthy or untrustworthy are all communicated by the environment.

Environments filled with safety and belonging help to buffer students from stress and provide consistency so that students can fully develop and thrive. Young people are more able to learn and take risks when they feel not only physically safe with routines and order, but also emotionally and identity safe, such that they and their culture are a valued part of the community. To cultivate an environment with these features, a school can do the following:

Build a Safe and Caring Learning Environment: The brain loves order; it is calm when things are orderly and gets unsettled when it does not know what is coming next. Learning communities can intentionally implement structures and practices that reduce stress while increasing productivity, curiosity, and exploration.

These include the creation of **shared values and norms**, particularly those framed as "do's" that guide relationships (e.g., respect, responsibility, kindness) rather than "don'ts" that direct punishments (e.g., don't talk or move). These can take the form of codeveloped community agreements or classroom roles, which serve as part of a proactive, positive approach to classroom management that affirms each student's value, emphasizes communal responsibility, and develops

student agency. Practitioners can also establish **consistent routines** that support positive, culturally responsive interactions (e.g. daily greetings, regular community meetings, celebrations of student experiences) to create a safe and caring environment.

Develop Practices That Are Trauma-Informed and Healing-Oriented: Schools can be designed to promote wellness for all students and to provide targeted supports for students dealing with challenges when needed. In addition to providing practitioners with professional learning on the impact of trauma on student development, schools can implement:

- healing and calming opportunities, such as mindfulness, breathing exercises, and quiet corners, which can create a time for students to reflect, reduce stress, monitor and redirect their attention, and develop emotional awareness; and
- **trauma-informed supports**, including regular check-ins with students; empathetic responses to signals of distress; communication channels with families; access to counseling; and structures that support attachment, such as advisories, home visits, and looping, which allow school staff to know students and their families well and to get young people the support they need when they need it.

A focus on trauma alone can be stigmatizing and deficit-based and runs the risk of focusing on intervention and treatment rather than fostering the conditions that support overall well-being. Therefore, it is critical that practitioners implement healing practices that can support individuals and groups who have experienced collective harm.

Implement Restorative Practices: Restorative practices support healthy relationships and a sense of community to prevent and address conflict and wrongdoing. Eliminating zero-tolerance and exclusionary discipline practices is an essential step before implementing approaches such as:

- **consistent time for relationship-building and sharing**, including community circles and daily classroom meetings, which are opportunities to build trust, empathy, and connection among and between students and educators; and
- **strategies for conflict resolution**, such as restorative justice and restorative conferences, which allow students to reflect on any mistakes, facilitate empathetic communication and exchanges, and repair damage to the community with the support of trained mediators or peers.

Creating a restorative environment helps students feel safe; promotes healing; and provides the opportunity for agency that can enhance social, emotional, and academic behaviors.

Foster Inclusive, Culturally Responsive Learning Environments: Culturally responsive learning environments build on students' experiences and intentionally bring their voices and identities into the classroom. This helps to create an identity-safe and engaging atmosphere for learning and enables all students to have a sense of belonging. Structures and practices that support such efforts include:

• **culturally affirming materials and activities**, such as curriculum, community-based projects, and the use of affirmation statements, that communicate the many ways students are valued and allow for multiple modes for learning and knowledge expression;

- **inclusive learning environments**, which provide students with universal access to high-quality curricula while eliminating stigmatizing practices like tracking or other exclusionary practices that communicate differential worth and ability; and
- **inclusive and supportive extracurriculars** made available to all without screens or financial barriers, which can affirm students' identities and interests and strengthen their interpersonal skills and relationships.

Within these structures, practices should seek to dismantle stereotype threats that undermine performance. Such threats result from anxieties students may carry about how they are viewed when they are members of groups stigmatized by society on the basis of race, income, language or immigration status, sexual orientation, or other characteristics. In identity-safe and affirming classrooms, teachers avoid labeling students in ways that implicitly categorize some as worthy and others as unseen or problematic, and they find many ways to provide positive affirmations about individual and group competence.

Rich Learning Experiences and Knowledge Development

Learning is a function both of teaching—what is taught and how it is taught—and of student perceptions about the material being taught and about themselves as learners. Students learn best when they are engaged in authentic activities and are collaboratively working and learning with peers to deepen their understanding and to transfer knowledge and skills to new contexts and problems. Students' motivation, performance, and belief in their abilities are shaped by the nature of learning tasks and contexts and can be nurtured by skillful teaching that builds on students' cultures, prior knowledge, and experience to accomplish meaningful tasks.

Educators can implement rich learning experiences, which enable students to deeply understand disciplinary content, communicate effectively, build analytic skills, and develop and transfer skills and knowledge to new and increasingly complex problems. Because learning is individual, teachers need opportunities and tools to understand and accommodate students' interests and distinctive learning pathways. Approaches to curriculum design and instruction should recognize that learning will happen in fits and starts that require flexible scaffolding and supports, differentiated strategies to reach common goals and support productive struggle that leads to new skills, and methods to leverage learners' strengths to address areas for growth. To do this, schools can implement the following:

Universal Design for Learning: All learning is variable. To enable the success of diverse learners without tracking and stigma, educators should allow for the use of varied teaching and learning modalities that connect to students' experiences and prior knowledge. The Universal Design for Learning framework provides guidelines that can support practitioners in creating learning experiences that allow students to use multiple tools, forms of engagement, and modes of expression to demonstrate their learning.

Scaffolds for Success: Learning scaffolds are the structures and practices that provide students with the guidance that allows them to master increasingly complex skills more readily and to achieve conceptual understanding. Effective scaffolds include:

- motivating tasks, which make learning opportunities relevant, clear, and authentic;
- **structured supports**, which chunk performance tasks and offer thoughtful guidance so students can make meaning and feel reassured throughout the learning process;

- **formative assessments** that offer close observations of students' work and provide educators with rich information about students' thinking, which can, in turn, inform next steps in the learning process;
- **tools**, such as assistive technologies, classroom artifacts that remind students of facts and processes they've learned, and other memory assists that free up the mind's attention for higher-order thinking; and
- **multiple ways to show understanding**, through which students have varied opportunities and options for exploring, understanding, and demonstrating their learning and see the connections among ideas and events across time, space, and disciplines.

Inquiry-Based Learning: To optimize learning, educators should build on students' prior knowledge, connect it to the big ideas of a discipline, and design tasks that are engaging and relevant to their interests. A powerful way that this can be enabled is through inquiry-based learning that engages students in finding the answers to meaningful questions. This approach—which can structure a single day's lesson or a multiweek project—allows students to take an active role in constructing knowledge, to engage in authentic tasks, and ultimately to "learn to learn." Inquiry-based learning is most effective when it is carefully scaffolded and supported by educators with direct instruction, informational resources, structures for group work, and other tools at key junctures.

Performance Assessments: Performance assessments ask students to apply their knowledge and skills by creating a product, presentation, and/or demonstration that is then assembled through a portfolio or other systematic work collection over time to demonstrate growth and achievement. These assessments are most effective when they incorporate opportunities for feedback and revision and are guided by well-defined criteria that guide learning and support the application of skills and knowledge to new contexts. In addition, providing opportunities for students to set goals and to assess their own work and that of their peers—often using rubrics and presentations that allow for questioning and exchange—can encourage students to become increasingly self-aware, confident, and independent learners.

Culturally Responsive Pedagogy: Culturally responsive pedagogy invites students' identities into the classroom to support rigorous learning by affirming their strengths and by making explicit connections between students' prior knowledge and cultural experiences and the content under study. Doing so enables educators to be responsive to students—both by validating and reflecting the diverse backgrounds they bring and by building upon their unique knowledge to propel critical thinking. This teaching challenges and supports students in transferring knowledge and skills to new content areas and, ultimately, improves their achievement and leads to greater competence. It also furthers belonging and inclusion as well as positive identity development and engagement in learning. Culturally responsive approaches include:

- practices for learning about and from students and their communities, such as classroom meetings, carefully chosen assignments, journaling, surveys, and community walks, which can allow educators to know students and the knowledge they carry;
- **opportunities for student voice and agency**, which include activities that explore identity or community issues and allow young people to think about what they have experienced, care about, and can do;

- **community-based projects**, which ask students to critically analyze relevant questions or problems within their communities and take action to make change; and
- **content and materials** that empower students to value their own and other cultures and incorporate cultural information into the heart of curriculum, instead of simply adding on at the margin. These materials should also build bridges between students' experiences and school content that draw on the familiar to propel new learning and expression.

Adopting culturally responsive pedagogical approaches requires that practitioners acknowledge that teaching and learning can perpetuate patterns of inequity. With this understanding, educators can design learning experiences that disrupt these patterns and enable growth of higher-order skills and academic competencies.

Development of Social, Emotional, and Cognitive Skills, Habits, and Mindsets

Advances in neuroscience show that the parts of the brain are cross-wired and functionally interconnected: There is not a math part of the brain that is separate from the emotional and social skills parts of the brain. For deep learning to occur, educators need to simultaneously develop students' cognitive, social, and emotional skills, which can serve as the building blocks for academic learning.

These skills, including executive function, growth mindset, personal and social awareness, interpersonal skills, resilience and perseverance, metacognition, and self-direction, can and should be taught, modeled, and practiced just like traditional academic skills and should be integrated across curriculum areas and all the settings in the school. When such skills are practiced sufficiently to become habits, they develop engaged and productive learners who can be resourceful in new situations while treating others with kindness and contributing positively to their communities. Schools can develop young people's skills, habits, and mindsets through structures and practices in the following ways:

Integrating Cognitive, Social, and Emotional Development Into Learning: Academic learning must be accompanied by curriculum and instruction that engages students in developing their social, emotional, and cognitive skills. To develop skills in coherent ways across classrooms, schools can identify the skills, habits, and mindsets they value as a community as an important starting point. These, in turn, can inform the adoption of structures to support student mastery toward those goals. These can include:

- dedicated and consistent time for social, emotional, and cognitive learning—in classroom meetings, advisories, and other settings—which helps students develop a sense of purpose, growth mindsets, and targeted skills such as self-direction, self-awareness, and perseverance, along with other valued competencies;
- **evidence-based programs and curricula**, which enable students to explicitly learn and practice valued skills, habits, and mindsets in active, well-sequenced ways; and
- **integrated opportunities and routines** (e.g., collaboration protocols, schoolwide conflict resolution strategies, staff modeling of these skills in approaches to problem-solving) that reinforce skills, habits, and mindsets in intentional and organic ways during classes, lunchtime, recess, extracurriculars, and other parts of the school day.

Developing Productive Habits and Mindsets: Students' beliefs and attitudes have a powerful effect on their learning and well-being. Thus, helping young people build productive habits and mindsets can set into motion a cascade of effects that accumulate over time to result in more positive school outcomes, such as an increasing sense of connection to school, a greater self-concept, and higher levels of academic engagement. Instructional strategies that support this development include those that:

- **nurture productive mindsets that enable perseverance and resilience**, including frequent opportunities for feedback and revision that allow students to see and experience their growing competency and mastery;
- **develop executive function**, which can include well-designed projects and exhibitions of learning that help young people develop the ability to plan, organize their efforts, problem-solve, and self-manage;
- **develop interpersonal and communication skills** through opportunities for wellstructured student collaboration, presentation, and peer-to-peer interaction that enable students to describe their academic work and learning and develop their teamwork skills; and
- **promote self-awareness and metacognitive thinking** through opportunities for reflection, self-regulation, and self-assessment (e.g., reflection protocols, rubrics, cumulative portfolios of work) that enable students to take stock of their strengths, challenges, and progress.

Educators can model these practices in culturally affirming ways, provide appropriate scaffolds, enable productive struggle that leads to new skills, and affirm students' abilities and assets to make this learning and skill development visible and supported.

Integrated Support Systems

Today, we know that a healthy context for learning and development requires attention to young people's safety; physical and mental health; social, emotional, and cognitive development; academic skills; and identities. Students have unique needs, interests, and assets to build upon, as well as areas of vulnerability to strengthen without stigma or shame. Schools with integrated support systems attend to these realities and create a coordinated web of structures that readily meet students' holistic needs, especially students from historically marginalized groups. They buffer excessive stress with secure relationships coupled with academic, health, mental health, and social service supports. They also provide opportunities to extend learning; build on interests and passions; and create ongoing opportunities for exploration, enrichment, and discovery.

All students will experience different needs at different times. It is therefore helpful to create **multi-tiered systems of support** (MTSS), which can provide a continuum of supports to remove barriers and advance student learning and well-being in collaborative ways. Even more important than the interventions themselves is how MTSS is operationalized to create genuinely helpful, readily accessible, and personalized supports that are asset-oriented and free of bias. To do this, MTSS can be enabled by robust systems for assessing strengths, challenges, and needs, which provide insights into:

- students' individual strengths and struggles;
- patterns for groups of students across grade levels and content areas; and

• school and community resources that should be accessed to meet individual and collective needs for programs and services.

With data like these, practitioners can better understand how to strengthen conditions in schools, adjust their practices, and integrate supports, particularly when school staff collaboratively analyze data and identify and monitor interventions in timely and consistent ways.

MTSS typically include the following three tiers that promote learning and development:

Universal Supports: Universal supports, also known as **Tier 1** interventions, are everyday classroom practices that make the core work of the school supportive for students. These include:

- **relationship-building structures**, such as advisories, teaching teams, and looping, that enable staff to know their students well;
- **collaboration structures** among staff and between staff and families that allow for regular communication, knowledge sharing, and discussions of how to best support students; and
- **shared understandings of development**, which help practitioners and parents think about students holistically and nurture them in consistent ways.

Universal supports are also made effective through the implementation of pedagogical practices based on the Universal Design for Learning framework, the creation of safe and inclusive school environments, and culturally responsive pedagogies that make content accessible to a wide range of learners.

Supplemental Supports: Supplemental supports help surface the additional interventions that may be needed for students' academic, social, emotional, and cognitive development. These interventions, often termed **Tier 2** supports, can include:

- **dedicated personnel**, like learning specialists, counselors, or social workers, who are on-site and work as part of student support teams to provide students with extra help in classrooms or in established resource rooms;
- **additional time**, including flexible opportunities like open office hours or dedicated class periods during which students and educators can come together to work through course material or other learning challenges;
- **high-quality tutoring**, which is implemented by well-trained tutors who work consistently with individuals or small groups of students; and
- **extended learning time**, like after-school or summer learning programs and bridge programs held during school breaks, in which expert teachers work with small groups of students to accelerate or enrich their learning.

Supplemental supports are most impactful when they are consistently implemented by wellprepared staff and easily accessed in non-stigmatized ways. In addition, the practices used within these forums need to be informed by strong pedagogical knowledge; affirming relationships; and approaches that are focused on engagement, acceleration, and support for student agency.

Intensive Supports: An integrated support system should have individualized supports in place that can provide more intensive intervention for learners when needed. These supports, often

known as **Tier 3** interventions, should orchestrate access to programs and services to provide these highly personalized services and supports for learning and well-being. Structures that support access to high-quality Tier 3 interventions include:

- **coordination of services**, which include structures, routines, and personnel that link students to a range of academic, health, and social services;
- **regular check-ins and meetings** across teams, roles, and stakeholders that can enhance communication and data exchange and ensure that students have access to what they need when they need it; and
- **partnerships** between schools and nonprofits that enhance a school's capacity to provide access to services, youth programs, and academic and cultural enrichment.

Access to intensive supports should be supported by culturally responsive, personalized, and assetbased practices. In addition, schools must ensure that supports are organized in ways that make access easy and do not create tracking or segregated learning spaces. **Community schools**, which incorporate integrated support systems as a characteristic feature and often have dedicated staff who support service coordination, family engagement, and resource and needs assessments, are a promising school model that can support systematic and coherent multi-tiered systems of support.

Integrating the Design Principles for Optimized Learning

While each of the Guiding Principles for Equitable Whole Child Design is critical to supporting youth learning and development, their impact is deeply felt and highly effective when practitioners integrate all five into a coherent, continuously reinforcing set of practices.

Science tells us that the brain is malleable, and experience and context affect its growth and development. When individuals are immersed in contexts and have experiences that foster emotional well-being, social competence, and cognitive capacity and skill building, they are provided with a strong foundation for academic and life success.

Once we understand that environments, experiences, and relationships drive the wiring of our brains, the task before us becomes clear: to design settings for optimal learning and development of the whole child. There is not just one way to integrate or combine whole child practices and structures in a learning setting. All learning is variable, and the approaches to school design, curricula, and educator development should embrace variation while holding to the Guiding Principles of Equitable Whole Child Design. By doing so, schools can identify and nurture students' assets and promote student growth in multiple areas of competence, as well as promoting and nurturing student confidence.

You can see two illustrations of integrating the elements of whole child design through the work of practitioners at Springfield Renaissance School and San Francisco Community School here and in the school case studies listed below:

- Deeper Learning Networks: Taking Student-Centered Learning and Equity to Scale
- Elementary Schools for Equity: Policies and Practices That Help Close the Opportunity Gap
- *High Schools for Equity: Policy Supports for Student Learning in Communities of Color*

- Social Emotional Learning in High School: How Three Urban High Schools Engage, Educate, and Empower Youth
- Social Justice Humanitas Academy: A Community School Approach to Whole Child Education
- Student-Centered Schools: Closing the Opportunity Gap case studies
- Teaching for Powerful Learning: Lessons From Gateway Public Schools
- Teaching the Way Students Learn Best: Lessons From Bronxdale High School

The above case studies demonstrate approaches to redesigning schools for quality teaching and strong relationships; rethinking curriculum, assessment, and accountability structures to better support learning; orchestrating professional learning in ways that support continuous improvement; and building unified integrated support systems.

Schools designed using the levers of human development can be our new 21st century learning system: a system designed to reveal talent and potential and ensure that all young people can thrive. This vision constitutes a transformational shift in the purpose of our learning systems and a dismantling of the systems that constrain this vision, grounded in what we know today about human development, the development of the brain, and learning science.

