

# INTRODUCTION

## BUILDING A BETTER FUTURE

Our current educational system simply is not meeting the needs of an increasingly diverse student population. Too many students continue to be left behind. In short, we can do better.

Often, I have found that when new instructional practices are implemented, teachers feel that what they are doing now—even though it may be yielding great results—is not good enough. This is not the case. We just want to help their instruction to make an even bigger impact. It is time to rethink our learning systems and environments to support the success of *all* students in the future. Let us design highly flexible and modern learning spaces that are more inclusive of everyone, stimulate and engage a new generation of learners, and effectively support a wide range of learning activities.

Today's children and teens face considerable challenges, and research suggests they feel quite anxious about their lives. Only a few years removed from a global pandemic, students still have not fully recovered from the trauma they experienced during this life-altering event. Meanwhile, existential crises such as climate change, gun violence, and the emergence of technologies like robotics and generative AI have created a complex and uncertain future for them to navigate.

It is no wonder, then, that anxiety and depression are at an all-time high among youth. Many students continue to feel isolated from their peers and disconnected from school—and an alarming number suffer from persistent sadness and a lack of hope.

While students must rise above tough challenges to succeed, that is also true of the educators tasked with preparing them for this complex and uncertain future. Helping students thrive will require strategies designed to address their social-emotional and academic needs. Educators must draw upon inclusive learning concepts such as trauma-informed practices and Universal Design for Learning to ensure that *all* students feel safe, welcome, engaged, and connected

within the learning environment. Only by establishing this connection will students be able to flourish.

But designing an inclusive K–12 learning environment is about more than delivering fully accessible instruction or creating a classroom culture in which all students feel like part of a learning community. The design of the physical environment matters, too. How a classroom space is designed, furnished, and equipped plays a key role in whether students feel welcome in that space and how effectively they can learn. This book will help to provide a framework for creating any environment within the K–12 setting. Although this will give a global view intended for school leaders, classroom teachers can learn aspects to implement within their own classrooms.

If there is one good thing to emerge from the pandemic, it is the realization that our current educational system is failing to meet the needs of an increasingly diverse student population. Too many students continue to be left behind. In short, we can do better.

As education leaders think about how to chart a new path forward, learning space design must be a key consideration. By being intentional in our approach, we can design highly flexible and modern learning spaces that are more inclusive and welcoming for everyone, that stimulate and engage today's learners, and that effectively support a wide range of learning activities.

This book offers a roadmap for doing just that.

In **Chapter 1**, I describe the challenges facing students (and educators), using evidence to explain why our current learning environments need to change—and why standing pat is not an option.

In **Chapter 2**, I outline the critical link between the design of a learning space and the quality of instruction that occurs there, as well as student outcomes. Citing evidence, I explain how the right type of learning environment creates the conditions under which students and educators can thrive—academically, socially, physically, mentally, *and* emotionally.

**Chapter 3** describes the all-important shift from classic to collaborative learning, explaining how well-designed classrooms can effectively support more active, engaging, dynamic, and student-centered learning.

**Chapter 4** reveals what students need to thrive socially and emotionally—and how learning spaces can foster healthier student well-being by supporting these conditions.

**Chapter 5** explains what *teachers* need to be effective, and how learning space design can meet these needs.

Synthesizing the information from the first five chapters, **Chapter 6** offers a framework for what a future-ready learning environment should include—including essential components of a modern learning environment.

**Chapter 7** examines specialized learning environments such as media centers, makerspaces, and sensory rooms.

**Chapter 8** explores how K–12 leaders can support a culture of continuous learning by strategically applying the six essential elements to the design of non-instructional spaces as well.

Finally, **Chapter 9** contains practical advice for how K–12 leaders can apply the lessons in this book to design future-ready learning environments in their own schools. This chapter provides a blueprint for both a pilot program and implementation of these new learning environments.

#### Features and Benefits

- Chapter highlights
- Illustrations of innovative student-focused learning spaces
- Tools: Self-Assessments & Worksheets
- Reflection Questions
- Key Chapter Takeaways

The message I hope to leave readers with is this: The days of a “one-size-fits-all” approach to education are long gone—and modern learning environments must be flexible and adaptable to support a wide variety of learning needs.

By reimagining learning environments for a new generation, we can create spaces that effectively support engaging, high-quality instruction using modern tools and methods. Spaces that are welcoming and inclusive of all students. Spaces where students and teachers feel safe, comfortable, and supported to do their best work. Spaces that help transition users beyond the trauma they experienced during the pandemic. Spaces that allow *everyone* to thrive.

Today’s students are growing up in a world that demands more support, more flexibility, and more intentional approaches to teaching and learning than ever before—and our learning environments must evolve to meet those needs. I am calling on **school leaders, educators, communities, and policymakers** to work together in transforming schools as spaces that nurture

the whole child—not just academically, but socially, emotionally, and physically.

**School leaders** must lead the charge by investing in innovative spaces like wellness rooms, movement rooms, career focused rooms, and flexible classrooms that support emotional regulation, achievement, and student engagement. **Educators**, as daily witnesses to students’ needs, are essential supporters in designing and using these spaces effectively—bringing their insight, expertise, and voice to the forefront of this transformation. **Communities** must step in and become a piece of the change. You must talk about what your students need, what the community needs, and step in to support change. And **policymakers** must align funding and legislation to support professional development for educators, support innovation, and understand the demands on students today—ensuring equity and impact throughout districts across the nation.

“Empirical evidence . . . suggests that the design of learning spaces makes a difference in student success as measured by academic engagement behavior.”  
(Scott-Webber, 2014)

This is more than a trend—it is a necessary shift. Let us move beyond outdated models and create schools where students are seen, supported, and empowered to succeed. Together, we can reimagine learning spaces so that they reflect the needs of today and unlock the potential of a new generation of students.

# WHY OUR SPACES NEED TO CHANGE

## CHAPTER 1

In this chapter, I will highlight the challenges educators face in reaching an increasingly diverse student population with a wide range of academic and social-emotional needs. I will explain how learning space design must change if we want to empower students (and teachers) for success. In later chapters, we will discover the framework for designing new learning environments.

In 2023, Lajward was an 18-year-old student living in Houston. As part of a journalism project capturing youth voices talking about the mental health crisis, Lajward said:

*The best way I can describe being a young person today is that it's like your life is starting in a world that feels like it's ending or getting worse. Coming from a public high school that had virtually no specific resources for mental health, if I or my friends wanted help for anything from social life stress to deeper anxieties about gun violence and the climate crisis, we would have [to talk with] specific teachers that were connected to their students and genuinely supportive. However, the teachers were doing that outside of their actual jobs.*

(Scalawag, 2023)

Young people today are dealing with all sorts of pressures they are not equipped to face. The college application process has become ultra-competitive, leading Lajward to compare the process of competing for a spot at a prestigious university to *The Hunger Games*. The constant presence of smartphones and social media has given rise to online bullying, while also prompting youth to compare their own lives to the impossible standards they see online.

According to one recent student health survey in Oregon, 70% of high school juniors reported feeling nervous, anxious, or on edge for

several days in a 30-day period—while almost a quarter of students experienced these emotions nearly every day (Miller, 2024).

Feeling anxious, depressed, or unsafe is not conducive to learning, and the youth mental health crisis is taking a big toll on education. Chronic absenteeism has “exploded” since the pandemic, the *New York Times* reports, with an estimated 26% of public school students considered chronically absent during the 2022–23 school year—up from 15% before COVID (Mervosh & Paris, 2024).

## THE CHANGING WORLD

.....

Youth mental health is a big challenge, but it is not the only one educators face. For students to succeed academically, they need to be emotionally invested in their classes and intellectually stimulated by the material. In other words, they have to be fully *engaged* in their learning. Yet, too few students have this experience in U.S. classrooms today.

According to research, students give their school a “C+” rating in making them feel excited about learning, on average—with just 13% giving their school an “A” on this metric. While a slight majority of middle school students (54%) give their school at least a “B” in making them feel excited to learn, fewer than half of high school students (44%) do. (Gallup, 2023).

One reason for the lack of engagement is that many students do not see the relevance of their education. Students need to feel like what they are learning in class, and *how* they are learning it, will prepare them for a rapidly changing future.

The skills students will need when they graduate are not the same as a generation ago. The nature of work is now radically different: Automation and AI are replacing lower-skill jobs, and students will need more sophisticated skills that cannot be learned by simply sitting and taking in information. Developing these skills requires more active forms of learning in which students are researching, discussing, analyzing, collaborating, and creating new knowledge for themselves.

To succeed in an uncertain future, students must learn to be critical thinkers, collaborative problem solvers, creative risk-takers, and global communicators. According to LinkedIn, effective communication is the No. 1 skill that employers are looking for, and they also highly value skills such as the ability to analyze and interpret complex information, work together in teams to solve problems, and adapt quickly to changing circumstances (Brodnitz, 2024).

As the skills that students need for success are changing, technology is also changing how we learn on our own—and therefore how students expect to learn when they are at school.

The Internet has opened an entire world of information to students. Today’s students are accustomed to using the web for self-directed learning at a very young age, and powerful technologies now enable them to develop, edit, publish, and share their own creative works—from blog posts and fan fiction to music, videos, and other inventions. Students are spending their free time looking up information for themselves, connecting with friends online to work on projects together, and exercising their creativity . . . and this is how they expect to learn at school as well.

According to the annual “Speak Up” survey of K–12 students from the nonprofit organization Project Tomorrow, six in 10 students in grades 6–12 say they regularly use online videos and other technology to learn about topics that interest them, beyond teacher sponsorship—and 43% engage in this type of self-directed learning at least weekly. Fifty-nine percent said they like learning when they can be in control of when and how they learn, and 48% said they wish their teachers gave them more choice in the classroom (Project Tomorrow, 2023).

“In short,” Project Tomorrow said, “students want learning experiences in the classroom to replicate the types of highly engaging and purposeful learning they are doing on their own beyond the classroom.”

## MEETING MULTIPLE NEEDS

.....

As educators are trying to transform instruction to make it more relevant for today’s students, they are also tasked with meeting a wide range of student needs. No two students are alike, and each child learns in a different way.

Not only do students bring very different backgrounds and childhood experiences with them to school, and not only are many grappling with anxiety, depression, and various traumas that affect their ability to learn, but students also have widely varied academic needs and abilities. According to the Pew Research Center, during the 2021–22 school year, 7.3 million students—about 15% of the total public school population—were identified as having special needs. Between the 2000–01 and 2021–22 school years, all but 12 states experienced growth in their special education student populations; the biggest increase—65%—occurred in Utah. Students with autism made up 12% of those with special needs in 2021–22, compared with just 1.5% in 2000–01 (Pew Research Center, 2023). Increasingly, a majority of students with Individualized Education Programs (IEPs) are receiving at least some of their instruction within mainstream classroom environments.

Neurodiversity is also top of mind with educators today. Neurodiversity is a biological term that explains the differences in the

human brain. In education, we go on to further define a neurodivergence as an umbrella term for a person who has a brain that differs from what is considered the “norm.” However, we should also consider that every person faces stress, being tired, hunger, and happiness that all impact them in different ways. When we face these different states, we each may need a different kind of support. I call this neuropreference. Neuropreferences are the needs a person might experience during moments of stress, fatigue, hunger, or happiness. Think about a time when you were very tired or stressed out about a situation. This stress may push you to need a walk outside, find a quiet space, or even feel the need to dance.

The student populations that schools are teaching are also becoming more linguistically diverse. According to Navarro, English learners accounted for 10.6% of all public school students in the United States in fall 2021, up from 9.4% in fall 2011 (Najarro, 2024).

Collectively, these figures demonstrate that teachers must reach a student body with an increasingly wide range of academic and social-emotional needs. Students thrive when they have choices in the seat that fits their learning best. Figure 1.1 shows students choosing different types of floor seats.

## STATUS QUO IS NOT AN OPTION

To rise to these challenges and deliver meaningful, engaging, and high-quality instruction that meets all students where they are, educators need all the help they can get.

They need positive and healthy school climates that are welcoming and inclusive of all students. They need supportive school and district leaders who listen to their concerns and provide all necessary resources. They need ongoing training and mentoring to ensure they can do their jobs effectively, with time to plan collaboratively with their colleagues. And they need counselors, school psychologists, and other professionals to make sure students are receiving the mental health support they require.

The learning environment itself is also a critical resource. As I will explain in the next chapter, how a classroom is designed, furnished, and equipped plays a key role in supporting—or hindering—both student and teacher success.

“Students who used flexible furniture reported greater satisfaction with the learning environment than their peers who used traditional furniture.”

(Gao, et al, 2021)

A well-designed learning environment helps students feel safe, secure, comfortable, and welcome, so they can focus effectively on instruction. It helps students learn in the kinds of hands-on, collaborative ways they will need to thrive in the workplaces of the future. And it helps teachers meet a wide range of student needs and abilities.



**Figure 1.1**

**Seating Choices Facilitate Learning**



*Photo Credit: Muzo Works*

Yet, research from the National Center for Education Statistics (NCES) suggests that the vast majority of students are still learning in outdated school environments that are ill-equipped to meet modern requirements.

The average age of a school building in the United States is 49 years, according to an NCES survey. Nearly two in five schools—38%—were built before 1970. About a third of the nation’s public schools have never undergone any major renovations, replacements, or additions (Merod, 2024).

For over a century, the traditional classroom model—characterized by neatly arranged rows of desks facing the front—was well-suited for an era when whole-class, teacher-led instruction dominated. However, the needs of students and the nature of teaching and

learning have evolved significantly and change constantly. The rigid, one-size-fits-all classroom layout of the past is no longer effective in supporting the diverse, dynamic, and interactive learning experiences required today. This is no different than the one-size-fits-all instruction of the past changing to one that is more student-centered and personalized to meet students’ individual needs.

Future-ready instruction emphasizes **collaboration, creativity, and hands-on engagement**, yet traditional straight-row seating **hinders student interaction, teamwork, and meaningful discussions**. In today’s classrooms, students are not only reading books and taking notes but also **using technology, engaging with manipulatives, experimenting with maker materials, and programming robots**. Learning spaces must be designed to accommodate these multifaceted activities, ensuring that students can seamlessly transition between different modes of learning—whether working independently, in small groups, or as a whole class. Figure 1.2 shows a hallway hangout environment with multiple places to collaborate and work.

To truly support **future-ready instruction and learning**, classrooms must be **flexible, student-centered, and adaptable**—creating environments that foster engagement, critical thinking, and innovation. The time for rigid, front-facing rows is long gone. Instead, we must embrace learning spaces that empower students to collaborate, explore, and thrive.

The good news is, transforming K–12 learning environments does not have to be costly. Yes, new state-of-the-art spaces and furniture can help improve educational outcomes dramatically—but even minor changes can make a major difference.

Whether you are a superintendent who is building brand-new schools, a principal who is upgrading an existing building, or even a classroom teacher trying to remodel your classroom on a budget, this book will help guide you toward success.

## LOOKING AHEAD

Thoughtfully designed classrooms that promote student agency, develop collaborative spaces, and encourage hands-on learning experiences can lead to higher levels of engagement and academic success.

The challenges facing both students and educators today underscore the urgent need for converting learning environments into innovative future ready spaces. Schools that fail to evolve risk perpetuating disengagement, widening achievement gaps, and limiting students’ preparedness for the complexities in today’s world. However, by embracing innovative learning space design, schools can create more inclusive, flexible, and engaging environments that support diverse learning styles and social-emotional needs.

**Figure 1.2**

**Hallway Hangout**



*Photo Credit: MooreCo Inc.*

Investing in learning environments that foster collaboration, creativity, and well-being is not just a luxury—it is critical. Thoughtfully designed classrooms that promote student agency, develop collaborative spaces, and encourage hands-on learning experiences can lead to higher levels of engagement and academic success. Moreover, these changes can empower educators by providing them with the tools which are needed in their spaces to deliver dynamic instruction and personalized support for all students.

The future of education depends on how well schools adapt to the changing needs of students. Learning spaces must reflect the world students will enter after graduation—one that values adaptability, teamwork, and innovation. By prioritizing modern, student-centered learning spaces, educational leaders can help cultivate a generation of critical thinkers, problem-solvers, and lifelong learners.

This transformation will not happen overnight, but the need for change is clear. It will require a collective effort from educators, administrators, and communities to rethink how schools are designed. By taking action now, we can ensure that every student has access to a learning environment that nurtures their growth, ignites their curiosity, and prepares them for success in an ever-changing world.

How ready are you to implement change? Schools and districts should complete a **readiness rubric** before designing and implementing new learning environments to ensure a **strategic, informed, and sustainable** transformation. The following are several reasons why this is important prior to engaging in this journey.

## Reasons to Assess Organizational Readiness

### 1 Assess Organizational Readiness

A readiness rubric helps schools or districts evaluate **whether stakeholders, infrastructure, and instructional practices** are prepared for change. It ensures that teachers, administrators, and the community **understand and support** the shift to new learning environments.

### 2 Identify Gaps and Needs

By assessing factors such as **teacher training, collaboration strategies, and instructional alignment**, a readiness rubric highlights **potential challenges** and areas that need additional support.

### 3 Ensure Stakeholder Buy-In

Successful implementation requires **collaboration and consensus** among teachers,

administrators, and parents. Change can be met with **resistance if educators feel unprepared**. A rubric helps identify areas where the district can develop **professional development plans, clear communication strategies, and phased implementation steps** to ease the transition.

### 4 Measure and Sustain Success

A readiness rubric establishes **baseline data** that allows schools to track progress, measure the impact of changes, and make **continuous improvements** to learning environments over time. ●

A readiness rubric serves as a **roadmap for successful transformation**, ensuring that new learning environments are **purposeful, effective, and sustainable**. Without assessing readiness, schools risk **misalignment, wasted resources, and resistance to change**—making this an essential first step in the process. Once you have completed the Readiness Rubric at the end of this chapter, you can identify if your district or school is ready to begin the process of changing learning environments or if you should lay additional groundwork prior to these changes.

In the remaining chapters, I will describe how learning environments can adapt to meet students’ academic, social, and emotional needs more effectively, leading to better outcomes. In the meantime, to identify how prepared you are to undertake this journey in your own schools, you can assess where you are with **Tool 1: Self-Assessment: How Ready Are You to Implement Change?**

## SELF-ASSESSMENT: HOW READY ARE YOU TO IMPLEMENT CHANGE?

READINESS FOR IMPLEMENTATION					
	FIXED MINDSET	DEFINITION MINDSET	ENGAGEMENT MINDSET	GROWTH MINDSET	EMBEDDED IN CULTURE / MAINTENANCE MINDSET
School View or Teacher Belief on: "Learning using new environments and instructional practices in schools."	Optional/Not Important Learning environments are not an important element to good teaching.  While a well-designed learning environment can be beneficial, students can still learn effectively without it, and I can manage my teaching without it.	Have To A conducive learning environment is something our kids will need to be effective in the future, and I believe we should find ways to use these new learning environments somehow.  I am not really sure on how to change my instructional practice or use this type of learning environment, but I know I probably should.	Want To Learning environments and instructional practices are powerful in supporting classroom learning.  We have access to the best research practices that can be implemented into the classroom. We know and believe the environment can be used as a tool.	Need To (Imperative) Learning environments and instructional practices are transformative.  They give us opportunities to learn and create in ways that we were not able to before. We not only have access to information, but we also create it while connecting and having conversations with other education professionals.	Standard and Expected Learning environments and instructional practices work with one another in an ongoing and creative way. Students understand and expect to be able to use the environment for their learning.  New teachers are taught and expected to adopt these research-based practices.

(Continued)

(Continued)

<b>Administrator involvement, support, and modelling on:</b>  "Learning using new environments and instructional practices in schools."	<b>"This doesn't apply to me"</b>  Believes that schools have too many initiatives to support right now, and learning environments are something that can be addressed at a later time.	<b>"Do This"</b>  Believes that learning environments should be implemented in meaningful ways by teachers, yet continues to facilitate professional development using the same model. Leaves the teacher responsible for designing the learning environment.	<b>Learning in Isolation</b>  Is open to implementing new learning environments but may not share learning openly with others. Helps to create culture by having conversations with small groups or one-to-one conversations but may still need to share learning in a transparent manner.	<b>"Let's Do This Together"</b>  Is actively engaged in their own learning and models this openly for others. Learning with open discourse is shared in one-to-one, small group, and large group settings.  Creates a culture where active collaboration leads to innovation by all community members. Intentionally works towards creating a powerful culture within the school, district, and larger community.	<b>"Setting up the future for success"</b>  Is not only engaged with the learning in the building, but looks both internally and externally for opportunities for staff to continue to learn. The learning culture in the building/district is non-negotiable. Learning is considered a shared experience between the learner and the teacher.
<b>How professional development is delivered regarding:</b>  "Learning using new	<b>No Focus</b>  There is no focus on supporting teachers in the use of the environment for learning.	<b>Told</b>  Teachers are told how environments can improve learning, but no powerful examples are shown, nor do they have the opportunity	<b>Shown</b>  Teachers are shown powerful examples of how environments and instructional practices can improve learning experiences for	<b>Experience</b>  Teachers experience the way that environments and instructional practices can transform learning. Professional	<b>Shared</b>  Professional development models what is expected in the classroom. Teachers are supported and



environments and instructional practices in schools."		to see for themselves or try new ideas.	students and promote opportunities for learning. They may get to try things on a controlled scale.	development involves teachers learning in new ways and understanding the impact environments can have on improving student learning.	motivated to take risks, explore, share, and experiment with their learning.
What it looks like in the classroom "Learning using new environments and instructional practices in schools."	Innovative environments are not used and instructional Practices are static There might be new environmental elements, but they may go unused due to insufficient professional development. They are more of a nuisance than a benefit.	Environmental tools are seen as an "thing" Students either use environments passively or not as an interactive tool. Only small amounts of time are relegated to the new instructional practices. Deep learning is not likely to happen because of sporadic use.	Environments and instructional practices are shared with learners often New environmental tools are always in the room to some extent, and students can use them and share them with others. Personal choice may be exercised but for only specific learning with the permission of the teacher.	Environments and instructional practice are ubiquitous Environments are similar to a pencil to each student. They are used when needed and they transform learning. Students have options for how to station themselves for different learning scenarios.	Instructional practices guide what is needed and used within the environment The instructional vision guides the needs of the classroom, and the adults embrace new tools as needed. The environments are flexible for future needs and uses.

Based on: Prochaska JO, Velicer WF. The Transtheoretical Model of Health Behavior Change. American Journal of Health Promotion. 1997;12(1):38-48. doi:10.4278/0890-1171-12.1.38

## ... REFLECTION QUESTIONS

1. What challenges do you see in your own school or educational setting, such as youth mental health struggles and disengagement in learning?
2. How do your current learning environments support or hinder students' ability to develop critical skills such as collaboration, problem-solving, and adaptability?
3. In your assessment as an administrator, do current classroom furniture and layout support or hinder student engagement, comfort, and collaboration? What changes can be made to furniture and layout to make them more supportive? ●

### Key Takeaways



1. **The Student Experience Has Changed**—Today's students face unprecedented challenges, including mental health struggles, social pressures, and rapidly evolving job market demands, which directly impact their engagement and academic success.
2. **Traditional Classrooms Are No Longer Enough**—Outdated learning environments do not support modern instructional methods or the diverse needs of students, making it harder for both students and teachers to succeed.
3. **Change Is Necessary and Possible**—Transforming learning spaces to be more flexible, student-centered, and technology-integrated can help bridge the gap between education and the real-world skills students need for the future.



**Figure 2.1**

**Hallways Can Be Used As Expanded Learning Spaces**

.....



*Photo Credit: MooreCo Inc.*