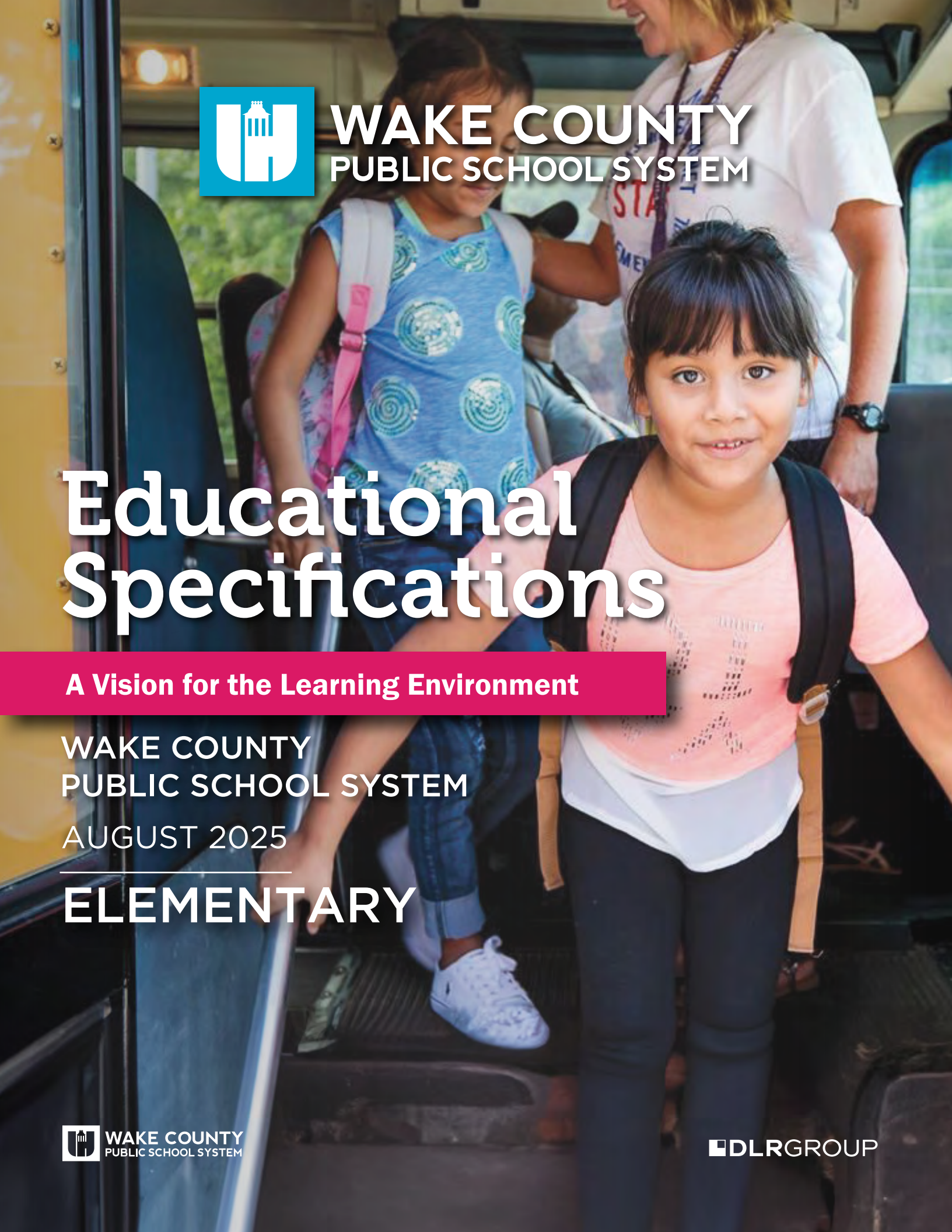

WAKE COUNTY
PUBLIC SCHOOL SYSTEM

Educational Specifications

A Vision for the Learning Environment

WAKE COUNTY
PUBLIC SCHOOL SYSTEM

AUGUST 2025

ELEMENTARY

WAKE COUNTY
PUBLIC SCHOOL SYSTEM

DLRGROUP

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> “Every student deserves to be challenged in meaningful learning each day.”

How to use this Document

This document, known as the Educational Specifications (Ed Specs) outlines design requirements by programmatic space for all elementary, middle, and high schools in the Wake County Public School System. Each school level has its own set of Space Types, Master Charts, and Space Standards.

It is the responsibility of the design team to incorporate the requirements outlined in this document and to review site-specific, unique or additional space requirements with WCPSS Facilities and Design department.

The Ed Specs consist of 5 parts used in conjunction with each other. They include:

Part I - Executive Summary

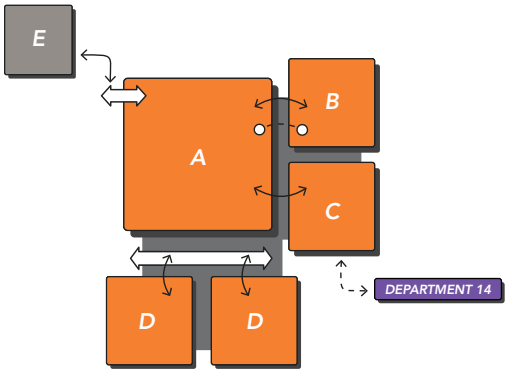
Part II - Process & Outcomes

Part III - Space Types

Part IV - Master Charts

Part V - Space Standards

Parts I and II are found in this document while III, IV, and V are issued separately.



Space Types

	Floor							
	Carpet Tile	Resilient Tile	Athletic	Porcelain Tile	Quarry Tile	Terrazzo	Wood	Concrete
Department 1								
A		○				○		
B								
C								
D	●	●						
E								

● Closed Requirement
○ Open Requirement
Quantity / LF

Master Charts

1	Department	TS	QTY	SF	Total
	Program A	Y	1	300	300
	Program B	N	1	150	150
	Program C	N	1	150	150
	Program D	Y	2	150	300

Space Standards



Part I

Executive Summary



Executive Summary

Part I - Executive Summary provides an understanding of WCPSS Educational Specifications by summarizing content related to purpose, findings, and recommendations. This section explains the intent behind creating the Ed Specs.

I Executive Summary



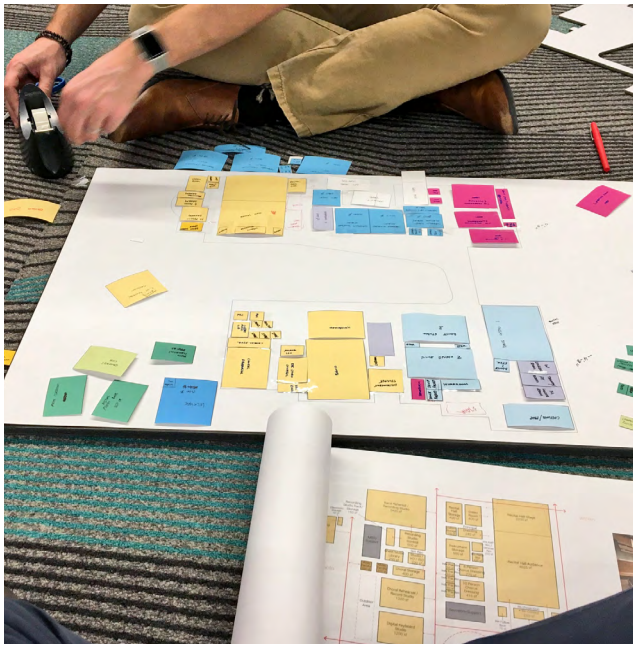
Introduction

Educational Specifications (Ed Specs) are guidelines for the design of effective and engaging learning environments and are intended to support the programmatic focus of the Wake County Public School System (WCPSS). Design teams of architects and engineers should reference this tool in collaboration with school communities to define elements of the built environment that will best serve learners in all new construction, partial modernization, or major renovation projects throughout WCPSS.

The Ed Specs outline the spaces and their associated area allocation (Part V - Space Standards) common to most WCPSS schools. Additionally, the Ed Specs provide information regarding ideal adjacencies and spatial attributes, requirements for visual and physical connectivity, and infrastructure considerations. They provide a conceptual and design basis for understanding WCPSS's guiding principles and vision for next generation of learning. The Ed Specs also incorporate sustainability and wellness goals, reflecting key stakeholder input and prioritization (see Appendix).

The Ed Specs serve as a supplement to the Design Guidelines, a technical companion document providing design criteria and requirements for design and construction. These two documents are intended to be used together to design and construct modern learning spaces for WCPSS.

I Executive Summary



What are the Goals of this Document?

Retiring the Learning Environment Guidelines (LEGs), initially established in 2018, provides an opportunity for WCPSS to provide better clarity, improved organization, and establish a sustainable path to updating this key facility planning resource.

The following are key goals for the creation of this document:

- Support WCPSS aspirations and educational pedagogical vision
- Establish District-wide parity
- Empower design teams to find creative solutions
- Implement evidence-based educational planning concepts



Who Contributed?

Building on workshops, focus group and steering committee discussions as well as surveys with stakeholders district-wide, the Educational Specifications begin to integrate the WCPSS Strategic Plan framework into the design of the physical learning environment.

Educators, administrators, students, school board members, facilities planning staff, and community experts provided valuable input on the learning environment's impact on key strategic planning goals including student knowledge and skills, student dispositions and well-being, and operational effectiveness.

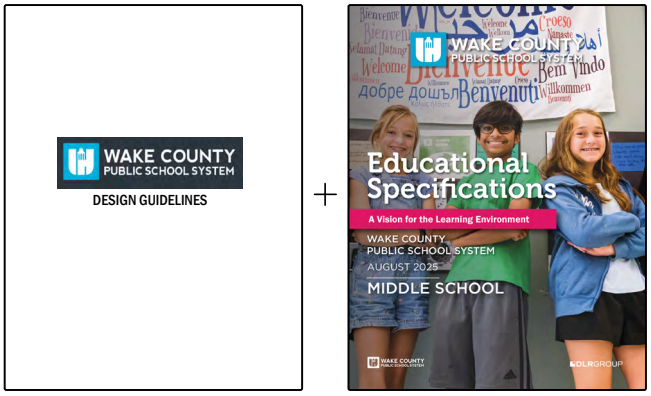
I Executive Summary



Why Replace LEGs?

In response to the WCPSS Vision 2020 core principles, WCPSS Educational Specifications represent a continued evolution of WCPSS Facility Design and Construction planning parameters in alignment with the WCPSS Strategic Plan. This guideline replaces the document formerly known as the “Learning Environment Guidelines” (LEGs) initially established in 2018.

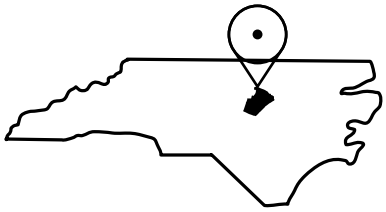
The Ed Specs pivot away from a prescriptive approach to a document that encourages the design community to collaborate with schools and facility planning staff, defining elements of the built environment that are essential to creating WCPSS-envisioned learning experiences. Thus, the Ed Specs should also be used by school communities to help shape conversations about new buildings and major additions.



How are the new Ed Specs Implemented?

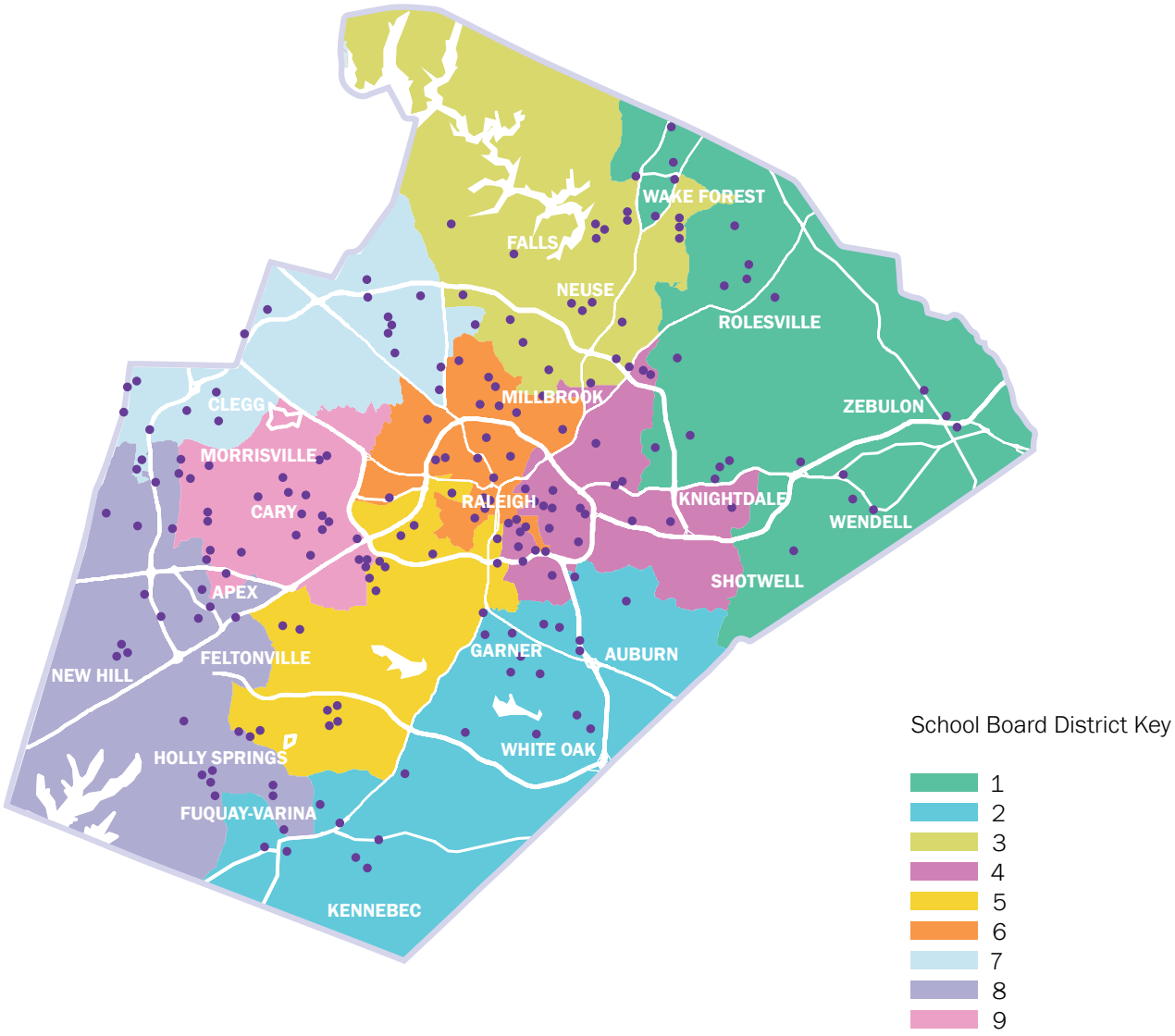
The Ed Specs are used in conjunction with WCPSS Design Guidelines. Where the Ed Specs outline the functional performance and intent of space types that comprise Wake County’s schools, the Design Guidelines provide specific requirements for how facilities should be built to ensure they are safe, maintainable, and long-standing for the communities they serve.

While the Ed Specs have been written in combination with WCPSS personnel, they are intended to support a collaborative design process among design teams, WCPSS campuses, and district-level representatives to design facilities that meet the vision for WCPSS schools.



NEARLY 200 SCHOOLS

Recognized as a leader in innovation and technology, Wake County is one of the fastest growing urban areas in the nation. As of the 2024-25 school year, the district maintains 200 schools across Wake County consisting of Elementary, Middle, High, Alternative, K-8 and 6-12 including Pre-K and magnet programs. WCPSS strives to create parity between schools across this large district, while allowing design teams to work with district staff and school communities to respond to the unique conditions of each project.



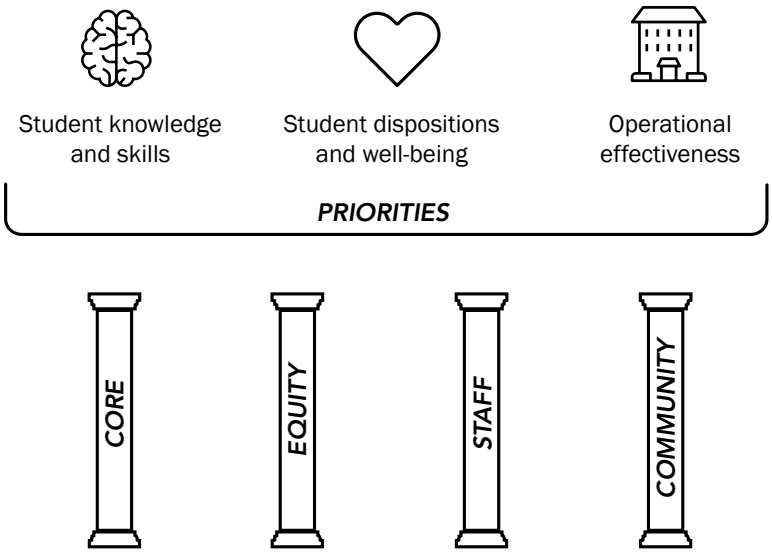
The District



Strategic Plan

By developing the Ed Specs, WCPSS embraced pathways to excellence and equity as envisioned in the Strategic Plan Framework 2023-28. This plan reflects a renewed commitment to key pieces of Vision 2020 and new focus areas to honor lessons learned during the pandemic.

The Ed Specs supports the Strategic Plan's essential pillars by illustrating the WCPSS vision to promote equity amongst schools, create areas of support for communities and the Parent-Teacher Association, promote wayfinding to the resources students need, and develop spaces for faculty and staff.



STRATEGIC PRIORITIES

Each of the three priorities have measurable targets to ensure WCPSS succeeds on behalf of students.

ESSENTIAL PILLARS

There are four essential pillars necessary to achieve the goals established by the strategic priorities.

I Executive Summary

Mission

"Wake County Public School System will provide a relevant and engaging education and will graduate students who are collaborative, creative, effective communicators and critical thinkers."

The district mission reflected in this document will be applied to all school construction projects within WCPSS, including new buildings, total and partial renovations, or any combination of these. The Ed Specs can also be adapted to the renovation of historic WCPSS school buildings.

Vision

"All Wake County Public School System students will be prepared to reach their full potential and lead productive lives in a complex and changing world."

Providing all students equitable opportunities begins at the facility level. A space that can adapt to future changes to meet the needs of all students, equitably and accessibly, will facilitate student growth and aid students in achieving their full potential.



Core Beliefs

Facilities are shaped based on WCPSS core beliefs, with the Ed Specs being a driver towards the goal. This document strives to align the following core beliefs with facilities-building projects, as they incorporate experiences and lessons learned from past building improvement programs:

- Meaningful learning everyday
- Eliminate socioeconomic gaps
- Well-supported staff
- Improvement and innovation
- Diverse school community
- Partnership
- Optimal environments

WCPSS Core Beliefs



Part II

Process and Outcomes



Process and Outcomes

Part II - Process and Outcomes provides an overview of the activities involved with the development of the Ed Specs. It outlines some of the top issues and priorities gathered through stakeholder engagement and district workshops in addition to established District strategic plan priorities with tangible goals implemented through design.



A Collaborative Effort

Educational Specifications Process

The Educational Specifications were created through layers of engagement with a variety of stakeholders. These collaborations were both forward-thinking (considering the goals and vision for the future of teaching and learning in Wake County Public Schools) and reflective (considering which design elements of existing schools support or hinder the educational vision).

A core committee of Facilities Design and Construction staff led this process. Through rigorous review, this core team ensured the Ed Specs align space design requirements with WCPSS vision and operational goals.

Building Tours

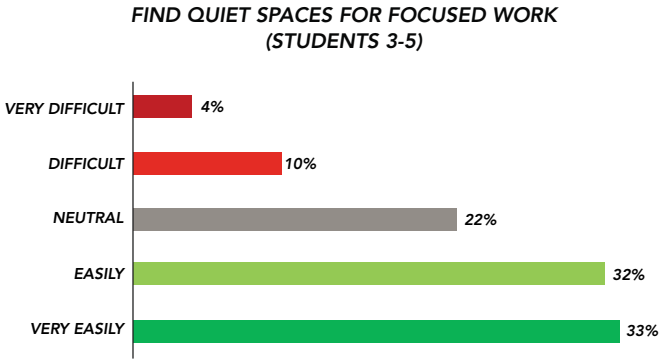
Wake County schools were toured to reflect on what is or is not working as intended. Participants observed ways in which students and teachers used learning environments for formal and informal learning activities.

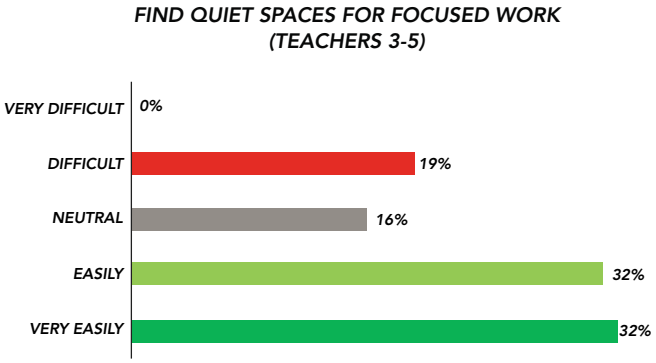
These tours prioritized the assessment of how physical spaces support Wake County Public School System's teaching and learning goals, but they did not assess student or teacher performance. Those on the tour were asked to reflect and discuss key questions after each tour, and their insights were incorporated into the development of the Ed Specs. The questions included:

» How could under-utilized spaces be better designed to improve utilization through alignment with teaching and learning practices?
» Are there high-demand spaces that WCPSS should prioritize expanding to meet key needs at specific campuses?

TEACHING AND LEARNING STYLES

ABILITY TO FIND QUIET SPACES





Student and Teacher Engagement Surveys

In the development of these Ed Specs, Wake County Public School System solicited feedback from students and teachers about how well their newest schools function as engaging learning environments. Studies show that for students of all ages, perceptions of engagement in learning activities is one of the best indicators for future academic success and a stronger life-long relationship with learning.[1]

WCPSS partnered with DLR Group, a national integrated design firm, to utilize survey tools called the Student and Teacher Engagement Indexes™ (SEI™ and TEI™).[2] This survey has been tested and refined to be both statistically reliable and valid, ensuring that findings from these surveys can provide meaningful insight.

Conveying a sampling of experiences from Pre-Kindergarten through Grade 12, a total of 310 students and 160 teachers from six schools across the district provided feedback on the SEI and TEI survey tools. Analysis from these surveys helped illuminate how the District's newest schools are supporting the teaching and learning vision. By understanding ways in which different teaching and learning activities are supported, as well as where different teaching and learning activities happen in the buildings, WCPSS has been able to make informed, key choices about the future programming of Wake County schools.

[1]Upadyaya, Katja, and Katariina Salmela-Aro. "Development of school engagement in association with academic success and well-being in varying social contexts: A review of empirical research." European Psychologist 18, no. 2 (2013): 136.

[2]Surveys were distributed from early November 2023 through mid-December 2023. Results were shared with district planning and academic leadership in Spring 2024. Findings and results can be found in the Appendix of this document.

SECONDARY ACADEMICS
General Classrooms

GOALS

- *DIFFERENT-SIZED CLASSROOMS CAN BE BASED ON ACTIVITIES / CONTENT*
- *FLEXIBLE FURNITURE FOR VARYING COLLABORATIVE ACTIVITIES*
- *SUPERVISED LEARNING COMMONS, ESPECIALLY IN MIDDLE SCHOOLS*

NON-NEGOTIABLES

- *EQUALITY AND ADAPTABILITY OF GEN-ED CLASSROOMS*
- *SAFETY IS #1 PRIORITY*
- *MUST HAVE SUPERVISION AND ELIMINATE DISTRACTIONS*

PRECEDENT IMAGES






Departmental Discussions

In the early months of 2024, a series of engagement sessions were held with targeted departments, educators and administrators. The purpose of these meetings was to understand the Educational Vision for teaching and learning for WCPSS through the lens of each department and discuss functional and facility design needs. This input ensures that all future Wake County schools are designed to support both the aspirational vision and current critical needs. This collaborative process engaged a wide variety of WCPSS staff to inform and support the creation of these Ed Specs.

The following topics were discussed with multiple departments through the Department Focus Group phase:

- Career and Technical Education (CTE)
- Counseling and Student Support Services
- Child Nutrition Services
- Early Learning / Pre-Kindergarten
- Equity Affairs
- Elementary Academics
- Secondary Academics (Middle and High School)
- Magnet and Curriculum Enhancement
- Area Superintendents and Student Assignment
- Safety and Security
- Physical Education
- Athletics
- Information Technology (IT)
- Furniture, Fixtures, and Equipment (FFE)
- Administration
- Visual and Performing Arts
- Maintenance and Operations
- Library and Media Services
- Transportation
- Special Education
- Outdoor Learning

During these engagement sessions, participants discussed goals, challenges, future trends, and other key ideas, along with analyses of the current space descriptions and critical adjacencies. This laid the groundwork for developing the Educational Specifications.



© 2015 DLR GROUP. "VALUES "

VALUES Workshop

Understanding the impact our school buildings have on operations, communities, and the environment, Wake County Public Schools determined the need for a more holistic District analysis of goals surrounding sustainability, social justice, economics, and community health. As Part of the Ed Spec development, WCPSS partnered with DLR Group to conduct a day-long workshop to begin creating that vision. DLR Group facilitated the workshop with a tool called VALUES, an acronym for "Viewing Architecture through the Lens of User Experience and Sustainability." VALUES takes a user-centered approach to understand values, goals, and metrics related to holistic sustainability. The VALUES tool and workshop were designed to expand the conversation beyond resource conservation to ecological, community, and human health. VALUES helps stakeholders identify top project goals, determine how success of these goals will be measured, and results in a values-based roadmap for project decision-making.[3]

Workshop attendees received level-setting educational information, allowing all participants to have a similar level of understanding, prior to participating in activities to first explore, then express, and finally prioritize VALUES topics.

1. VALUES Prioritization – Participants explored and discussed a framework of sustainability-related themes and design directions to identify top goals for WCPSS. Participants then prioritized these topics through a fictional budgeting exercise to find top goals.
2. Observe, Report, Measure – For each top goal selected, participants identified potential ways of measuring and evaluating whether a project successfully implemented a goal.
3. Headline – Participants imagined a headline that described the District's ideal outcomes in 10 years if all top goals and guidelines in facilities, operations, and design were enacted.

Attendees included school administrators and faculty, Board members, and representatives from community partners in governance, sustainability, and education. Members of the WCPSS planning and design team facilitated, along with subject-matter experts in sustainability and research.

[3]Workshop exercises and processes are discussed in detail in the VALUES Report in the Appendix of this document. DLR Group retains copyright of VALUES; use or reproduction is prohibited.



Design Implementation

VALUES Workshop Takeaways

A truly sustainable community cannot be achieved without balancing ecology, society, and economy. The aim of the VALUES workshop (described in detail above and in the Appendix) was to understand what a holistic, sustainable vision for Wake County Public School System looks like.

The following pages detail the Key Themes that were selected as the highest priorities for WCPSS. Accompanying Goals, Metrics, and Key Performance Indicators (KPIs) were established for each of these Themes and can be found in the VALUES report included in the Appendix.

To move from vision to action, participants focused on practical strategies for implementation, identifying specific projects and initiatives that align with goals. By establishing a roadmap for execution, the workshop aimed to ensure that the Key Themes becomes a tangible priority, translating ideas into measurable actions that can be monitored and adjusted over time.

Designing with the Key Themes

VALUES themes and goals are summarized in the following pages, and the metrics and KPIs are incorporated into the high-level space planning considerations in Part III - Space Types. Metrics can be viewed in the VALUES report, and should be utilized once the facilities are actively operating to measure progress toward meeting the goals.

Theme: A common thread or idea that should be carried throughout the project.

Goal: A desired outcome that can realize a theme.

Metric: A way of measuring progress towards achieving a goal.

Key Performance Indicators (KPI): A target value for a metric that can more clearly define a goal. We will know a goal is achieved when a KPI is reached.



Decarbonization & Electrification

Participants discussed the importance of not only aligning with the clean energy goals, but also the need to reduce consumption and optimize building systems, and delivery of consistent visual and thermal comfort for increased wellness and productivity. User-discussed solutions included energy use dashboards, improved rainwater management and reuse, reduced heat island effect, not using energy when people are not present, and energy storage for resilience and sheltering.

The goals are:

- Efficient Building Systems Selection: staff training to maintain efficient operations; LCCA
- Efficiency of Existing Operations: energy cost and site EUI tracking; benchmark buildings in portfolio
- Use of Alternative Fuels: track Scope 1&2 emissions; install solar; evaluate geoexchange



Intentional Procurement to Waste System

Participants discussed the importance of a “cradle to grave” mindset around waste prevention, waste diversion, and ecological stewardship through goods and services to support sustainability and health outcomes; examples given were to not use styrofoam and to cut other waste products.

The goals are:

- Waste Prevention: reducing reliance on single-use items; reuse FF&E
- Waste Diversion: labeled composting & recycling bins; recyclable / compostable materials
- “Cradle to Grave” Impact: Green Cleaning Policy; durable, healthy, low-carbon new FF&E



Welcoming, Biodiverse Campus

Participants envisioned outdoor campus spaces that were safe and welcoming for people as well as flora and fauna, to promote physical and mental health. Natural or garden areas (as opposed to paved) rich in the biodiversity of the region, outdoor learning spaces, and walking pathways for the public should be combined within a clear hierarchy of public and private space.

The goals are:

- Outdoor Learning Environments (OLE): ergonomic (WiFi & writable surfaces)
- Safe and Welcoming for Shared Use: accessible trails and nature-view seating
- Site Ecological Stewardship: permeable surfaces; pollinator-friendly maintenance/pest control; safe chemicals; low/no mow seasons



Student-Centered, Hands-On, Sustainable Learning

Participants envision WCPSS suffused with hands-on, real-world learning opportunities for students to engage with sustainability topics and sustainable behaviors in ways that can be incorporated into their lives and careers. “Active learning and play is mission one for Wake County Schools,” said one participant.

The goals are:

- Comfortable, Flexible Learning Spaces: Mobile furniture with integrated tech; teacher collaboration spaces; performance-based specifications for furniture
- Well-being for Improved Learning: Furniture for varied bodies and energy
- School as a Teaching Tool: Sustainability-focused CTE/makerspace



Community Partnerships for Public Support

WCPSS recognizes that support from the community is a key ingredient in success, and that the community will benefit from schools' choices. To build on the strength of this support, partnerships for communication and decision-making need to grow and thrive. This can be woven into the District's existing approach to equity.

The goals are:

» Community Partnerships for Equitable Success: identify secondary use for school spaces; identify emergency space use for resilience
» Community Partnerships for Real-World Learning: work with industry partners to provide equipment commensurate with that which would be used in the workplace



Safe, Multi-Modal Transportation

Workshop participants had a strong, clear commitment to reducing the transit-related carbon footprint of WCPSS while increasing healthy, active behaviors. Safety was a major component of this discussion, as were solutions that connect multiple modes of transit in one journey through incentives and scheduling alignment. User-discussed solutions included walkability, and other decarbonized transportation options. This can be woven into WCPSS's existing approach to equity.

The goals are:

» Communicate partnership and collaboration with regulatory / municipal partners
» Promote existing transportation infrastructure to reduce carpool
» Healthy, active alternatives: continuous paths to school through community when possible

Process and Outcomes



Supporting Strategic Plan Priorities

The Educational Specifications are a guidebook to assist designers in creating consistent, effective, and efficient school facilities. However, our built environment can impact us far more deeply than merely meeting the minimum baseline of keeping us warm, safe, and dry and within our budget. While this is a given (an absolute must), our spatial environments affect us profoundly and have the opportunity to achieve far greater goals.

The Wake County Public School System has undergone the critical work of developing its North Star—an in-depth strategic plan, focused on ever-improving to meet the needs of students, staff, and communities. Within the Strategic Plan are three Priorities, each with measurable Aims for accountability and to ensure that these become the guide for all endeavors undertaken by the District.

In that same spirit, key themes have emerged from the work of creating the Educational Specifications.

These themes are anchored in and organized by the WCPSS Strategic Plan 3 Priorities of improving:

1. Student Knowledge and Skills
2. Student Dispositions and Well-Being
3. Operational Effectiveness

Woven into every practice in supporting these Priorities is a mindset of equity. What exactly is this? It is the consistent approach to being student-centered, providing the support and environment needed for EACH and EVERY student with unique aptitudes and challenges, to achieve their self-determined definition of success.

WCPSS Strategic Plan



What is Wake County's stance on equity?

> *"We seek to foster academic success for every individual regardless of race, ethnicity, socioeconomic status, language of origin, disability, sex, gender identity, and sexual orientation. That requires more than merely preventing discrimination–it also means expanding opportunity and breaking down barriers. This is how we maintain our focus on increasing achievement for all students by providing a world-class education."*
>
> *Equity in WCPSS*

The Wake County Public School System is committed to a nondiscriminatory, inviting, and inclusive school environment for all students.



What does this kind of equity look like?

Meeting the individual needs of every student is reflected in:

- The pedagogy of differentiated learning and the accommodation of evolving relevant areas of study;
- Individualized social-emotional supports and services;
- Inclusion of all students into the academic and social experience of school;
- A physically and psychologically safe environment with the school building and throughout the grounds;
- The flexibility to adapt schools and spaces to accommodate responsiveness in the context of a continually changing world

These principles are further explained in the following sections.

PRIORITY 1: STUDENT KNOWLEDGE & SKILLS

"We will prioritize students' development in critical thinking, communication, collaboration, and creativity skills, commonly called 'The Four Cs'. And, we'll focus on foundational literacies, knowledge, and skills in the core subjects of Reading/Language Arts, Mathematics, Science, Social Studies, Fine Arts, Digital Literacy, Financial Literacy and other content areas."

WCPSS Strategic Plan

A Change in Academic Needs

Over the past 100 years, our world has changed dramatically. Modes of transportation, methods of communication, manufacturing, our homes, our workplaces and career choices, culture and values, clothing, entertainment, possessions, population, pollution and waste, and the list goes on. And it all will continue to evolve. So must our process and experience of education in order to prepare our students for constantly shifting paradigm.

WCPSS recognizes these shifts and is focused not only on the needed content of subject matter, but in developing the skills within students to understand the relevancy of what they are learning, how to analyze data and problem solve, how to share their learning with others, how to work together to address issues and come up with new solutions, and how to bring creative thinking to these processes.

To meet these academic needs K-12 students learn best through a combination of various methods and strategies tailored to their individual needs and the subject matter being taught. Here are some effective approaches to support Meaningful Learning:





Process and Outcomes



How to Support Meaningful Learning

» **Active Learning**
Encouraging students to actively engage with the material through discussions, hands-on activities, and problem-solving tasks

» **Differentiated Instruction**
Adapting teaching methods to accommodate different learning styles, abilities, and interests among students

» **Use of Technology**
Integrating educational technology tools such as interactive simulations, educational apps, and multimedia resources to enhance learning experiences

» **Collaborative Learning**
Facilitating group work and peer interactions to promote teamwork, communication skills, and cooperative problem-solving

» **Personalized Learning**
Providing opportunities for students to pursue their interests and pace their learning according to their abilities

» **Visual Aids**
Utilizing visual aids such as diagrams, charts, and graphs to help students visualize concepts and relationships.

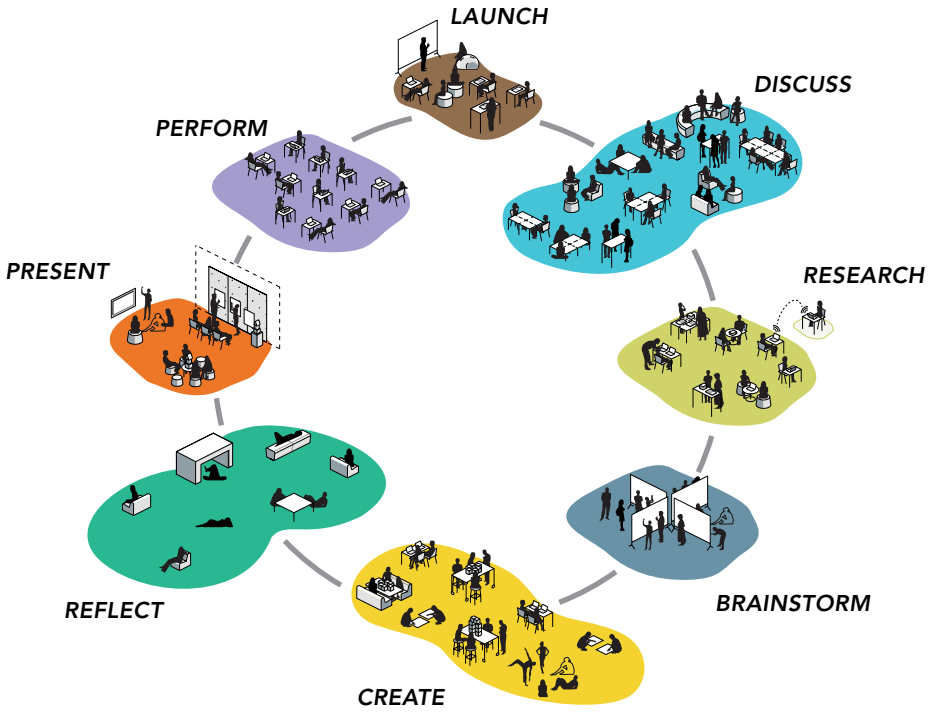
» **Constructivist Approaches**
Allowing students to construct their own understanding of concepts through exploration, inquiry, and discovery

» **Formative Assessment**
Using ongoing assessment techniques such as quizzes, polls, and informal checks for understanding to monitor student progress and adjust teaching accordingly

» **Real-World Connections**
Relating classroom learning to real-world applications and examples to make the content more meaningful and relevant to students

» **Teacher Support and Guidance**
Providing clear explanations, scaffolding, and feedback to help students navigate challenges and deepen their understanding

Process and Outcomes



Ultimately, the most effective approach may vary depending on the subject matter, grade level, and individual student needs. A combination of these methods, tailored to the specific learning environment and student population, tends to yield the best results in K-12 education.

What does this look like in the built environment? While the methodologies may differ, there are some common activities that should be considered. The following graphic represents the different stages of inquiry-based learning pedagogies and how furnishings can support the varying activities.

Many of these setting types can take place within the same space but it does require appropriate square footage within the learning environment and the usage of adjacent learning support spaces.

Learning Neighborhoods are comprised of the primary classroom, learning commons, labs, special education services classrooms and multi-purpose classrooms. A commitment to inclusion and equity is woven throughout this arrangement, distributing Special Education and support classrooms in a manner that encourages maximum integration with peers while responding to individual need. Barrier-free access to well-proportioned spaces supporting a variety of activity and group size benefits all students, regardless of ability.

Staff support spaces are also included to strengthen staff-to-staff and staff-to-student relationships to promote a sense of belonging, connection and support. When staff is supported, students are supported.

Additionally, outdoor spaces are a perfect location for many stages of inquiry based learning when applicable.



Library Trends

Special consideration should also be given to the design of the Library as a potential extension of the learning neighborhood activities. The design of K-12 school libraries has been evolving to accommodate modern educational needs and promote a variety of learning experiences. Some of the latest trends in K-12 school library designs include:

» **Flexible Learning Spaces**
Libraries are moving away from traditional fixed furniture arrangements towards flexible layouts that can be easily reconfigured for different activities such as group work, independent study, or presentations

» **Collaborative Zones**
Designing areas that facilitate collaboration among students and teachers, equipped with technology tools like interactive displays and flexible seating arrangements

» **Makerspaces**
Makerspaces are optional Learning Commons spaces that could be attached to the Library for creative activities part of the Library

» **Reading Nooks and Comfortable Spaces**
Creating inviting areas with comfortable seating, cozy reading nooks, and quiet zones that promote relaxation and concentration

These trends reflect a shift towards creating dynamic, inclusive, and technology-rich environments that support diverse learning styles and foster collaboration, creativity, and innovation among K-12 students. Librarys also serve as a hub for informal student socialization. They are frequently made available to students not only during class time, but also during lunch, break times, before school, and after school. This might affect the placement of the Library in relation to academic wings or proximity to dining commons and outdoor spaces.

Consideration should also be given to the acoustical zones of the Library, providing quiet leisure reading, areas of collaboration with moderate levels of sound and conversation, to socialization and louder collaboration or active learning experiences.

PRIORITY 2: STUDENT DISPOSITIONS AND WELL-BEING

> *"We will prioritize caring for students and staff as individuals and developing and maintaining positive social-emotional, behavioral, and mental health."*
>
> *WCPSS Strategic Plan*

Support Student Well-Being

The challenges that face students today are different that ever before. The onslaught of ideas, information, distraction, and judgment through social media and digital sources can, and often do, overwhelm young people. Students are still getting to know themselves and figuring out who they are. The skills, interests, and aptitudes that they possess are still being explored and developed. Society itself has slowly become more aware of even typical mental health issues faced and of the depth or prevalence of neurodiversity amongst the overall population. In such a roiling state, our students often need social-emotional support for their mental health and well-being to be successful academically and prepared for adulthood.

The counter-balance within the school system to all of this is the provision of a variety of responses. Students' well-being can be enhanced by strengthening their sense of belonging, connection to others and socialization, and opportunities for calming and play. Another response to addressing student mental and emotional health issues is through the provision of student support services. Counselors, social workers, psychologists, mental health providers, as well as other specialists are increasing in numbers to meet the needs of students. The District promotes an equitable and inclusive learning experience by providing a varied physical environment and targeted services to meet individual needs.





Process and Outcomes



Design Solutions to Cultivate Student Safety and Foster Respect

» **Reducing Incidents of Bullying with Inclusive Spaces**
Bullying remains a prevalent issue in schools, and the physical environment can contribute to reducing its incidence. For example, schools can be designed with open, transparent spaces where bullying behaviors are less likely to go unnoticed. Creating semi-private areas in corridors or common areas with open visibility ensures that students are less isolated, and supervision is more accessible. Additionally, ensuring well-monitored bathroom spaces helps minimize opportunities for bullying.

» **All-learner and Open Bathrooms**
Single, all-user student bathrooms provide a safe space for students. They reduce anxiety for any student who may feel uncomfortable in traditional bathrooms that are harder to supervise and minimize the risk of bullying. These bathroom types can be an opportunity in an area of the school and are often designed with open layouts that allow for individual stalls with floor-to-ceiling walls and doors, ensuring privacy while increasing adult supervision within the school. These spaces can be considered but not replace group restrooms at this time.

» **Promoting Connectedness and Inclusion**
Physical spaces that encourage collaboration and engagement foster relationships and a sense of connectedness among students. Flexible classrooms with movable furniture allow for adaptable learning environments where students can work together in groups, encouraging teamwork and positive interactions. Common areas, such as lounges, reading nooks, or “makerspaces,” invite students to explore interests, connect with peers, and take ownership of their learning environment.

» **Encouraging Sense of Belonging**
Students are more likely to feel a sense of belonging in a school that is designed to reflect their interests, personalities, and needs. Architectural features such as murals, student art displays, and community boards provide students with a platform to express themselves and showcase their accomplishments. Breakout spaces and multi-purpose rooms allow students to connect with teachers, mentors, and counselors in a less formal setting, helping to build trust and rapport. In turn, these connections create a stronger support system, reducing anxiety and fostering resilience.

Process and Outcomes



» **Incorporating Safe Areas for Emotional Regulation**
Many students face social and emotional challenges that require spaces for reflection and self-regulation. Calming rooms or sensory spaces can be equipped with comfortable seating, soft lighting, and sensory items such as tactile objects or white noise machines. These areas provide a place for students to decompress, seek respite from overstimulation, and practice emotional regulation strategies. Such spaces are beneficial for students experiencing high levels of stress, as well as those with special needs or sensory processing issues.

» **Creating Transparency and Openness**
Transparent and open spaces increase feelings of safety and belonging, as students can be seen by teachers and peers. Glass walls or partially open classrooms foster inclusivity by allowing students to feel part of the larger school community, even while engaged in different activities. Transparency in school design, particularly in communal areas, promotes accountability and reduces anxiety by creating a more cohesive, connected environment.

» **Natural Light and Connection to Nature**
Exposure to natural light and outdoor environments positively impacts students' mental health and academic performance. Large windows, skylights, and courtyards provide access to daylight, which is known to improve mood, focus, and overall well-being. Additionally, outdoor learning spaces, such as garden areas or outdoor classrooms, provide opportunities for students to engage with nature, reducing stress and fostering a sense of calm and connectedness.

Thoughtful school design incorporating these strategies will create environments where students not only feel secure but also feel valued and connected to their community. By prioritizing both physical and emotional safety, schools can foster a holistic environment that enables students to thrive.

PRIORITY 3: OPERATIONAL EFFECTIVENESS

"We will prioritize establishing structures and processes to provide timely and consistent service for every student and an inviting, safe environment for every school. The priorities will ensure that we operate efficiently, effectively and sustainably for all students, families and employees."
WCPSS Strategic Plan

A Change in Priorities

Like many school districts across the country, WCPSS faces tightening budgets, increasing needs for services, world-wide concern of depleting natural resources, and the deep concern of any threat of harm to students and staff. The District is vigilant on being as efficient, effective, sustainable, and safe as possible so that students and staff can focus on learning, free from worry and harm.

The Educational Specifications assist WCPSS in this core priority in several ways. Much consideration has been given to outlining design principles that promote safety in schools, but in a way that is welcoming and unobtrusive. When extreme safety measures are highly visible, its sends the subconscious message that occupants of the space are in danger and actually increase stress and anxiety, rather than alleviate these learning-inhibiting emotions. As outlined below, there are many safety practices that should be incorporated into all new and renovation construction projects to create not only a physically, but emotionally, safe environment, free from worry.

Flexibility is a key tenet for increased efficiency of space. Keeping in mind the intended objectives of forward-thinking educational methodologies, careful attention should be given to how spaces support this and how it can be adapted over time to a changing pedagogy that responds to a changing world.





Process and Outcomes



New Construction vs Renovation

Educational specifications (Ed Specs) can guide both new construction and renovations of K-12 schools, helping to create more equitable learning environments. Renovating existing spaces is one effective way to enhance consistency and functionality in educational facilities, which can otherwise be challenging to achieve. New construction provides opportunities to design buildings that meet modern standards and educational best practices. It also allows for the selection of sites that support outdoor learning, physical education, and athletics, while also meeting safety, circulation, and parking needs.

In renovation projects, however, Ed Specs must be used flexibly, as they may not be fully achievable in existing spaces. Rather than adhering strictly to square footage requirements and spatial adjacencies, it's essential to understand the intent behind each guideline. This means considering how spaces are meant to function and tailoring renovations to the unique needs of the local community and its students.

Renovation priorities should focus on areas where students spend the most time, such as learning neighborhoods. Here, best practices can be applied to support collaborative and inquiry-based learning. Next, flexible and adaptable student support spaces should be created, allowing them to evolve to meet changing needs and programs. Finally, specialized areas, like Career and Technical Education (CTE) spaces, should be adaptable to accommodate shifting pathways, enhancing student engagement and preparation for life beyond high school.

Ed Specs can be a valuable resource not only for comprehensive modernization projects but also for "spot" renovations, such as upgrading a single room (like a library) or a cluster of spaces (like district administration offices). Examples of smaller-scale renovations include converting classrooms into small-group learning spaces, refreshing Librarys, reducing asphalt to create micro-gardens or green spaces, and transforming underutilized areas into high-priority spaces. These targeted changes allow schools to better serve their communities and foster more effective learning environments.

Process and Outcomes



Sustainability for Operational Effectiveness

Wake County Public School System recognizes the vital role it plays as a community leader in promoting sustainable features into the design and operation of its facilities. In addition to modeling to students a commitment toward respecting the environment, WCPSS recognizes that students perform best in schools where the physical learning environment is comfortable, inspiring, well-ventilated, and well-lit. Effective learning environments are, in part, the result of implementing best practices in school design, followed by proper maintenance, and regular upgrades throughout the life of the building. WCPSS strives to make the best use of the public's resources to continuously improve our schools and educational experience for all our students.

Sustainability as an idea is woven throughout The District's Strategic Plan, guiding not only curriculum development and community engagement but also informing the architectural design of the buildings and site:

- **Core Belief #7:** All students and staff deserve to work in optimal learning environments supported by sufficient resources, well-maintained facilities, and sustainable operational systems.
- **Priority #3 Operational Effectiveness:** We will prioritize establishing structures and processes to provide timely and consistent services for every student in an inviting, safe environment. The priorities will ensure that we operate efficiently, effectively, and sustainably for all students, families, and employees.
- **Aim #2, tied to Priority #3:** We will establish new systemic processes and guidelines balancing operational efficiency, fiscal responsibility, and environmental sustainability.[5]

At the county level, the priority is decarbonization and protection of natural resources for the betterment of Wake County citizens. In this vein, the following County goals were established by resolution to achieve clean energy by 2050:

Process and Outcomes



- All new facilities shall be solar ready
- When solar implementation provides economic payback, renewable energy planning is to begin in an early building design phase
- Transition from fossil fuel based energy to providing 80% of energy consumed for operations from renewable energy sources by 2035
- When clean energy provides economic payback, transition to providing 100% of energy consumed for operations from clean, renewable energy sources by 2035

The District's contribution to these goals includes commitment to design and construction of high-performing facilities. The WCPSS 2024 Design Guidelines direct designers to "provide robust and cost-effective implementations of selected options for energy performance of systems and components"; they also establish Building Performance Targets (using energy use intensity (EUI) as a metric) for WCPSS buildings based on the building type:

Per the Wake County 2022 Energy Design and Management Guidelines, this "Energy Consumption Budget" is intended to provide a building that performs at least 14% better than the ANSI/ASHRAE/IES Standard 90.1-2010. Baseline and meeting the "Goal" would be considered an "excellent" achievement. Energy use reduction is to be pursued by incorporating natural solutions prior to mechanical, and optimizing building systems via energy modeling using strategies such as alternative HVAC equipment, building controls, building envelope, and sustainable energy options (solutions and design features to be considered are provided throughout the document). Design solutions must be low-maintenance to ensure sustainable operations.

These guidelines also provide:

1. Reporting forms for energy use of building systems resulting from energy modeling, and
2. Direction on: Life-Cycle Cost Analysis (LCCA) for design solutions, Life-Cycle Assessment (LCA) for materials, commissioning, and BMS Features



Safety and Security

Wake County is committed to ensuring that all campuses are safe and secure for students, staff, and communities. The objective is to keep students from physical and emotional harm and to remove barriers so that they can focus on learning.

For security purposes, the full extents of WCPSS facility requirements for safety are not outlined in these Ed Specs but will be conveyed to design teams by the Planner assigned to each project along with the WCPSS Security Guidelines. Safety and security needs are evolving, and the specific design requirements may vary at the time of design. Discussions around safety and security may include, but are not limited to:

- The inclusion of fully interior shelter spaces dispersed throughout the school that can serve as shelter areas during security or weather-based emergency events
- Operations of security vestibule based on anticipated safety and campus needs
- Designing to reduce and manage bullying and other behavioral events in schools that can compromise student wellness
- Designing to comply with safety and lockdown procedures during security incidents
- Standardization of campus signage for emergency responders and campus users

Refer to WCPSS Security Guidelines and North Carolina Department of Public Instruction (NCDPI) for further requirements.



Principals to Promote Physical Security

» **Visibility and Sight Lines**
Effective sight lines allow for the clear visibility of hallways, entrances, and communal areas. By eliminating visual obstructions, schools make it easier for staff to monitor student movement, deter intruders, and identify potential safety threats quickly. Large windows and open spaces can enhance sight lines, particularly near main entry points, stairwells, and corridors. In common areas, such as cafeterias or libraries, transparency is key to reducing the likelihood of unnoticed behavioral issues.

» **Night Lighting of Parking Lots and School Grounds**
Adequate lighting on school grounds, especially in parking lots, sidewalks, and entryways, deters trespassers and enables clear visibility for surveillance cameras. Motion-activated lights and strategically placed fixtures help create a well-lit environment, minimizing shadows and blind spots. This type of lighting increases the safety of students and staff during after-hours activities and discourages loitering or criminal activities on school property.

» **Controlled Access and Zoning**
Classrooms are designed as a safe refuge for students and staff. See WCPSS Security Guidelines for further information outlining design requirements. Additionally, zoning or compartmentalization within a school divides the building into sections that can support after hour activities. By separating learning areas, administrative offices, and recreational spaces, schools can control movement within the building after hours.

» **Wayfinding and Clear Signage**
Clear signage and intuitive wayfinding aid students, staff, and visitors in quickly understanding the layout of the school and moving towards safety during an emergency. Effective wayfinding includes well-marked building exits, arrows, maps, and distinct markers for key areas, like restrooms, offices, and classrooms, in addition to site signage for parking and entries. Signs should also be accessible for all students, including those with disabilities, ensuring that information is easily understood in stressful situations.

» **Secure Entry Vestibules**
Secure entry vestibules provide a buffer zone at the main entrance, allowing schools to monitor visitors and verify their identity before granting access. This design involves a controlled two-door system where visitors enter a secure space and must be identified before gaining entry. Additional access control measures, including a visitor management system within the main entry vestibule, will require visitors to present their identification. The physical structure of a secure vestibule serves as both a deterrent and an effective screening process, ensuring unauthorized individuals are less likely to enter the school.

» **Preparing for Natural Disasters**
Designing school facilities with natural disaster preparedness in mind is crucial for areas prone to tornadoes, hurricanes, or other hazards. Through thoughtful design, safe zones can offer protection during severe weather events. In areas susceptible to tornadoes, for instance, schools can incorporate secure places for students and staff, away from flying projectiles and glass. Be prepared to discuss evacuation and sheltering in place plans as part of educational commissioning. All applicable building code requirements must be addressed.



Part III

Space Types



Space Types

Part III - Space Types illustrates the program through department diagrams showing example configurations and critical adjacencies. Each space is broken down further by describing activities, access, and considerations.

Space Types

Introduction to Space Types

The information found in Part III - Space Types are intended for high-level space planning and to be used concurrently with Part IV - Master Charts and Part V- Space Standards. This section breaks down each department with a related color association throughout the supporting documents.

Found in each department's section are goals, beliefs, design impacts, and space adjacencies. Further, each program space is broken down to highlight the activities, access, and considerations when planning. Diagrams further depict the intent of the program spaces with specific District needs. Not every department is used.



Departments

1 Administration

2 Student Support Services

3 Pre-Kindergarten

4 Learning Neighborhood & Learning Commons

5 Special Education

6 Library

7 Career and Technical Education (CTE)
(NOT USED AT ELEMENTARY)

8 Physical Education

9 Visual and Performing Arts

10 Child Nutrition Services

11 Maintenance and Plant Operations

12 Technology

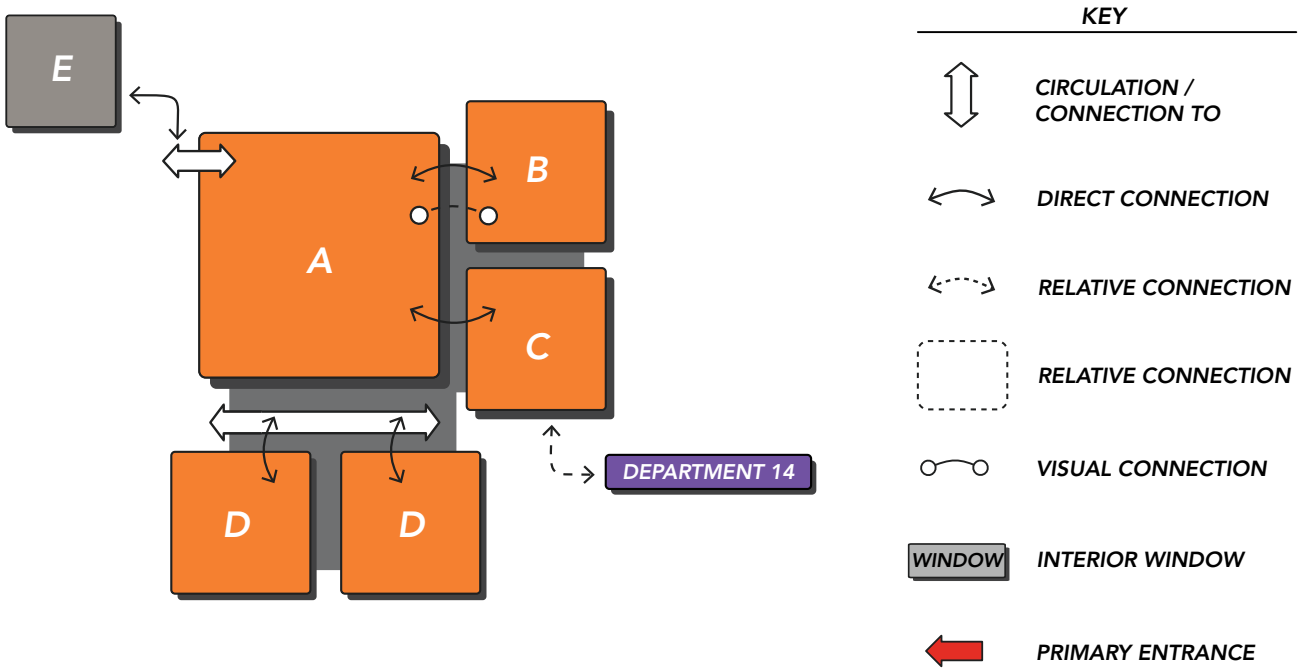
13 Building Support

14 Outdoor Physical Education and Play

15 Site Design

16 Transportation
(NOT USED AT ELEMENTARY)

Space Adjacencies



Interpreting the Space Adjacencies

1 Programs A and B need direct connection *and* visual connection

2 Program A needs direct access to the corridor. That same corridor needs direct access to Program E

3 Program E is in a different department, denoted by a different color

4 Program A and C need direct connection

5 Program C must be relatively near Department 14

6 Programs D are the same type of space and each need direct access to a corridor. This does not necessarily need to be the same corridor

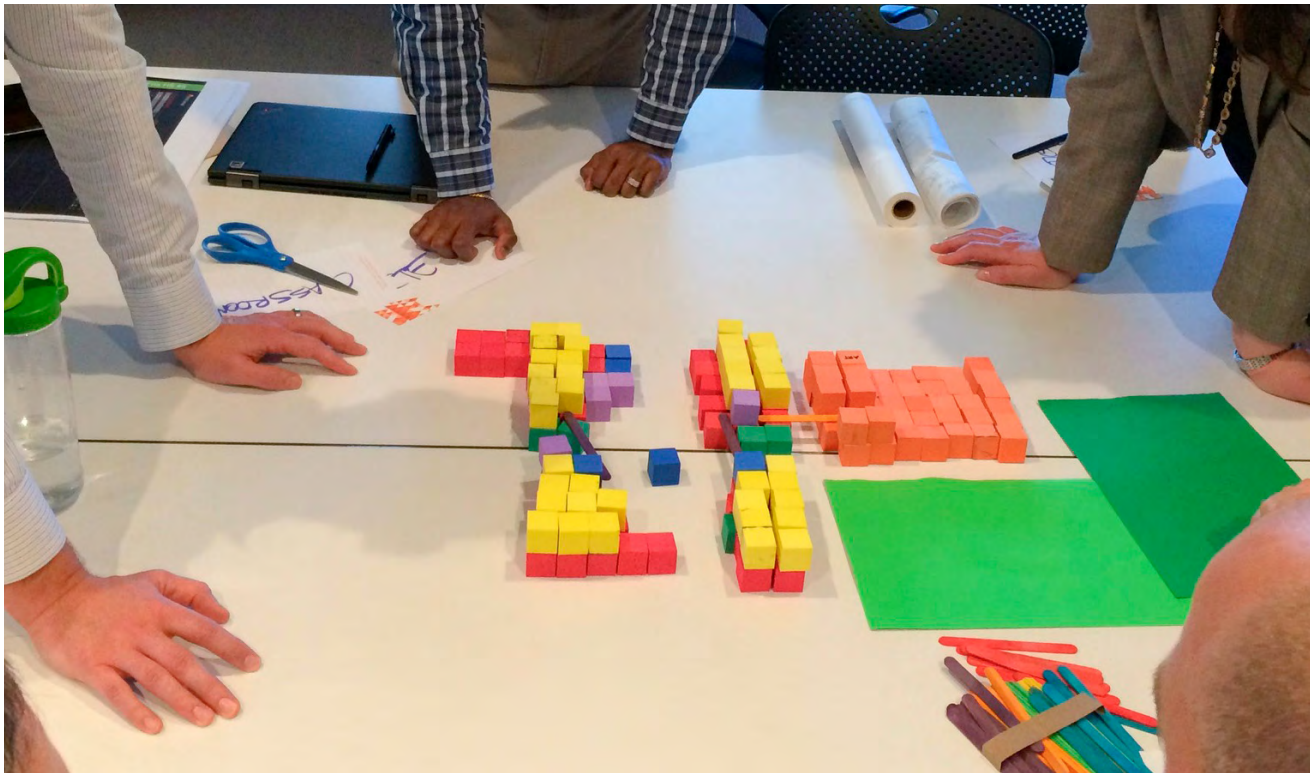
Overall Building Organization

The physical organization of an elementary school is carefully designed to balance accessibility, supervision, and a clear delineation between public and private spaces. A critical aspect of the layout is the separation of academic areas from large public zones, such as gymnasiums and auditoriums. These large-group areas should feature secondary entries for community events after school hours. Additionally, this area should include restrooms to meet the needs of visitors without allowing access to other parts of the school.

As a central hub for learning, the Library is ideally located close to the surrounding learning neighborhoods, fostering easy access for all students. Administrative offices are positioned at the front of the building to serve as the first point of contact, with support services adjacent but accessible via a separate entry to ensure privacy and efficiency.

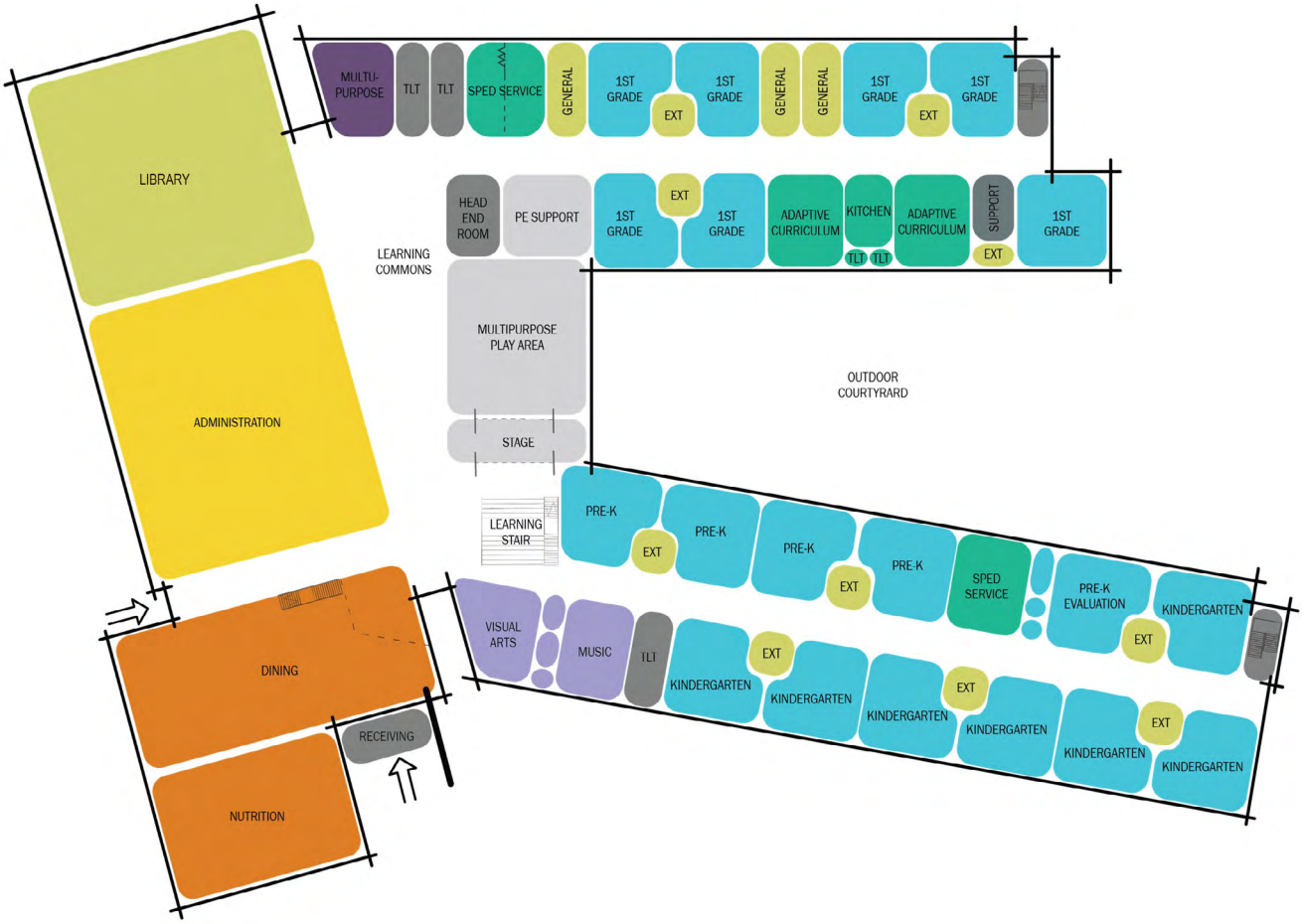
Special education classrooms are dispersed within the general learning communities, promoting inclusivity and minimizing travel distances for students who benefit from specialized resources. Early learning, Pre-K, and kindergarten classrooms are situated on the ground floor, typically near the administration to facilitate ease of supervision and rapid support for the youngest students. To enhance accessibility, these classrooms are also positioned close to frequently used spaces like the dining area, gymnasium, and Library.

For transitions between dining and outdoor play, thoughtful design includes restrooms, hand washing stations, and drinking fountains that are easily visible and accessible, ensuring hygiene and convenience. Overall, this organization prioritizes student safety, efficient movement between spaces, and accessibility, creating a supportive and functional learning environment tailored to the developmental needs of young children.



SPACE PLANNING

Using Part V - Space Standards and Part III - Space Types, program blocks can be organized to lay out the school in early design stages. Refer to the adjacency diagrams within Part III for connectivity needs and considerations.



Example: Pleasant Plains Elementary School | DLR Group

1

Administration





Administration

The School Administration Office plays a pivotal role in shaping the school's ethos. It creates a safe and welcoming environment, fostering a sense of belonging among students, staff, and parents.

The office provides leadership, sets the academic and ethical tone of the school, and ensures that policies are implemented effectively. It also builds a strong community by promoting open communication, encouraging parental involvement, and organizing events that bring people together. Moreover, the office conducts school management in an efficient manner, oversees daily operations, manages resources, and ensures the smooth functioning of the school.

This holistic approach contributes to a positive and productive learning environment.

Our Goals

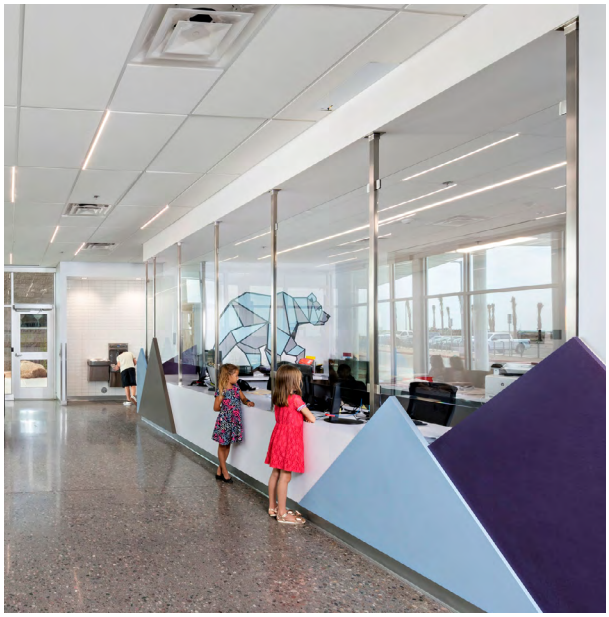
Safe and Welcoming Environment

Efficiency through **Strong Leadership**

Safety and security of all facilities and grounds

We Believe in

- A professional atmosphere for planning and conducting all school affairs in a warm and inviting manner
- Leadership for the school and fostering positive interactions between administrators, staff, students, and families
- Space for administrators and support personnel to perform assigned responsibilities in an efficient manner
- Design buildings that balance school safety with a welcoming atmosphere and sense of community

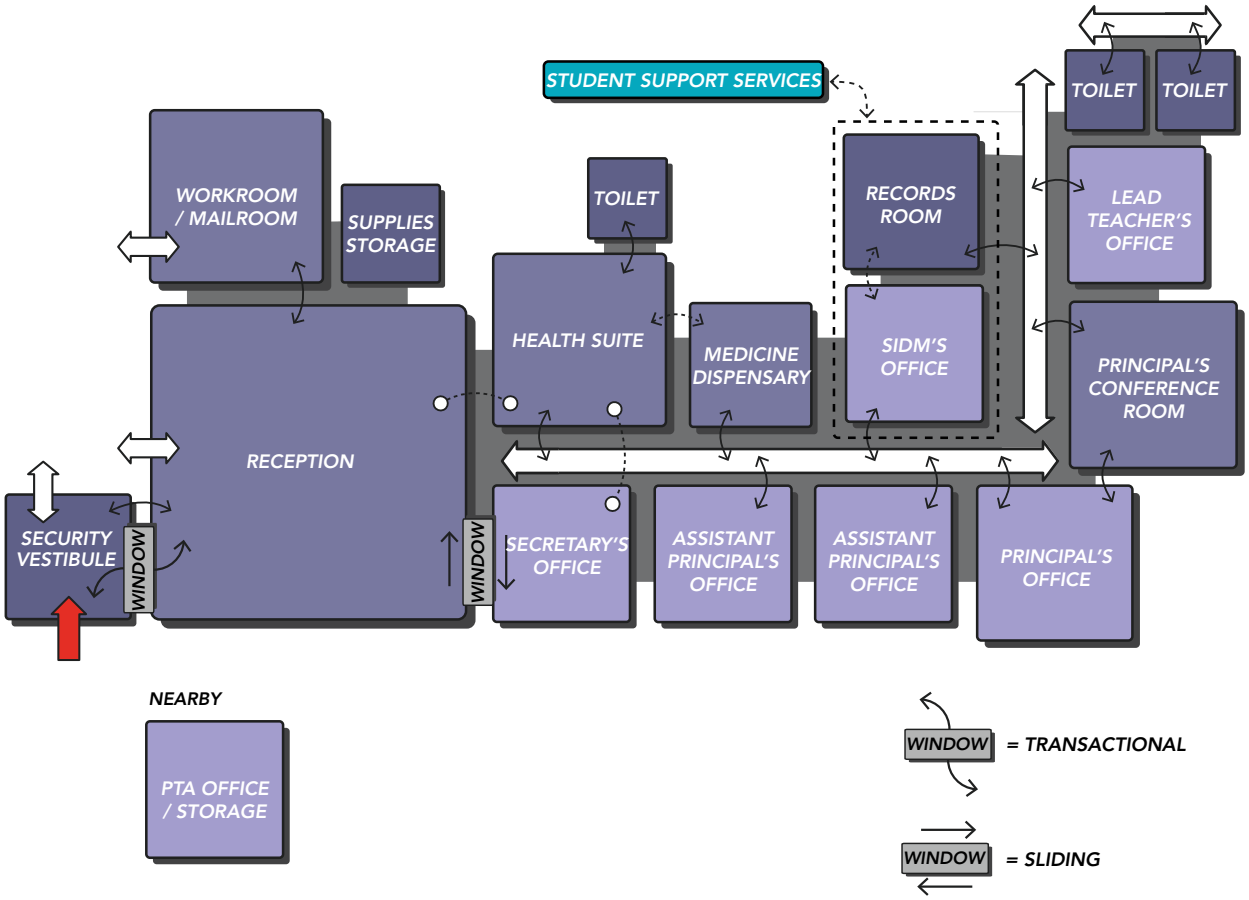


What this looks like

- Receiving students, staff, parents, and visitors
- Communicating with families, staff, students, and the public through in-person or virtual meetings, phone calls, or written communication
- Data analysis, planning, scheduling, and preparing reports
- Storage of student records, materials, and supplies
- Conducting grade-level staff meetings
- Distributing mail and other communications
- Preparing classroom media and other materials for students and staff
- Monitoring thermal, electrical, security, communications, and emergency systems
- Storing, monitoring, and administering medication
- Caring for injured and sick children and monitoring the Health Suite
- A monitoring station for specified school services
- An area for receiving visitors to the school
- A place to address those staff and student needs not met in other areas of the school



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

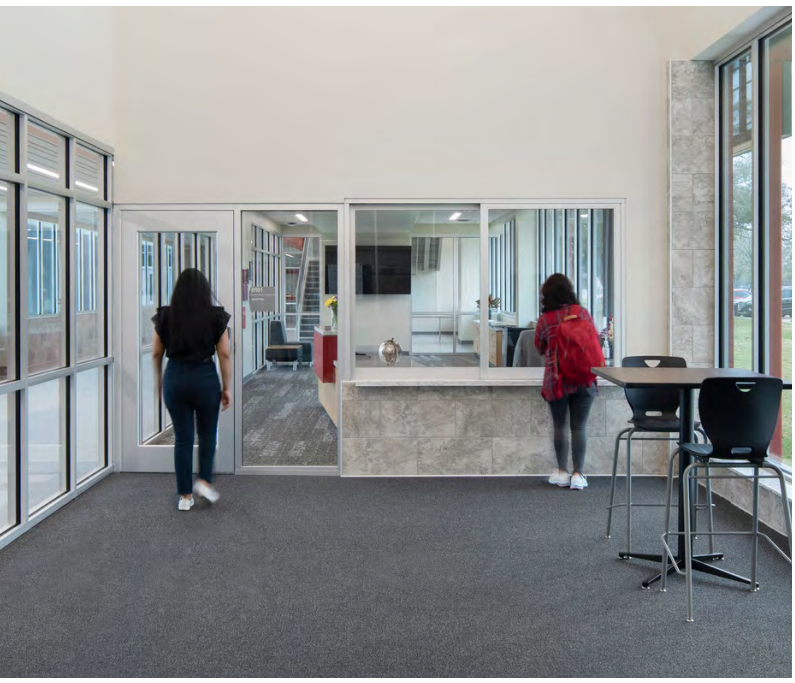
1 Locate Administration near main entrance of school, convenient to visitor parking

2 Provide a lockable door between Administration and Student Support Services, if connected, to be secured after school hours

3 Provide a layered security approach including access control at entry points, lock-down zones, visibility, clear circulation, and reliable communication within the building and to first responders during emergencies

4 Control visibility into the offices, especially at night, using roller shades at all windows

5 Provide an environment conducive to maintaining confidential discussions and handling of records



Security Vestibule

Activities
» Controlled visitor access point to school

Access
» Direct access into and out of school during student arrival and dismissal times for carpool and walking students

Considerations
» Clear sight lines from Reception to Security Vestibule
» Ability to remotely secure space limiting outside access into vestibule, access from vestibule into school corridor, and access into Administration
» See WCPSS Security Guidelines

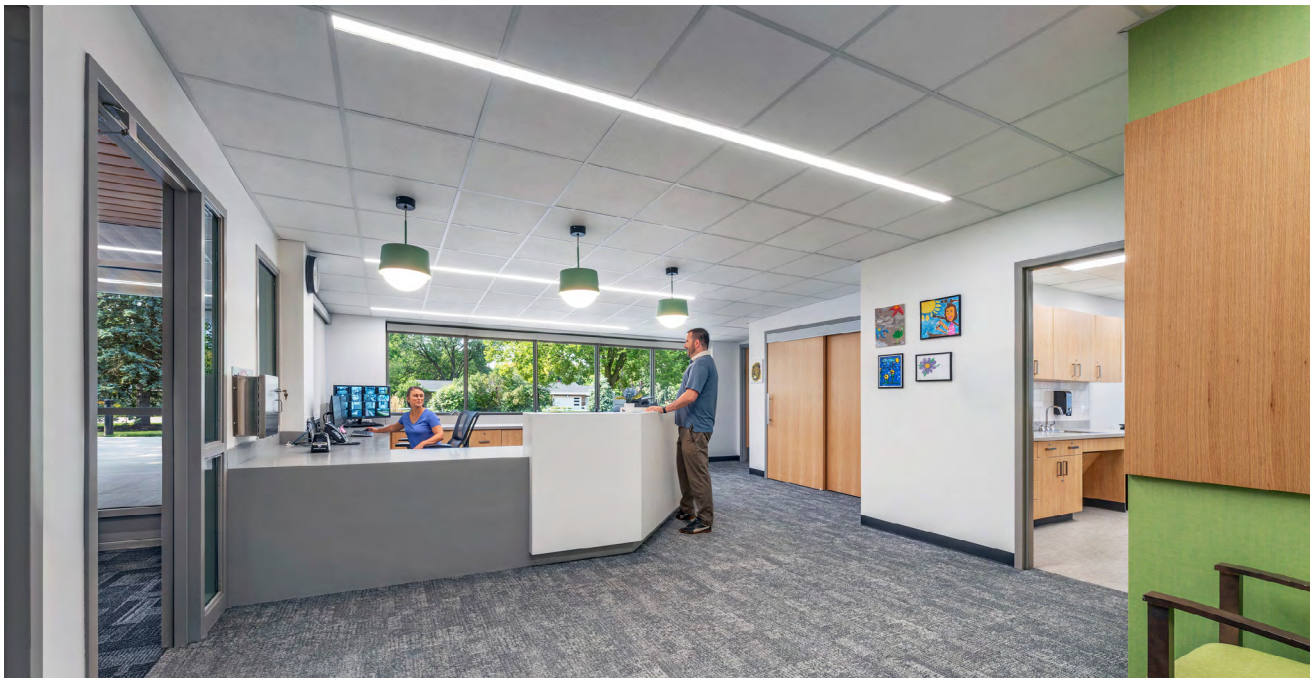


Workroom / Mailroom

Activities
» Duplication, collating, laminating, mail, and document distribution
» Assemble papers and workbooks

Access
» Direct access to Reception
» Direct access to teacher mailboxes from main circulation corridor. Provide access from Reception to load teacher mailboxes

Considerations
» Provide pass-through mailboxes as a peninsula or free-standing between mail pick-up area and work area



Reception

Activities
- Welcome students and families
- Remotely control who enters the building's front door
- Check in visitors and volunteers via Visitor Management System (VMS) located in the Security Vestibule
- Various administrative duties

Access
- Direct access from Security Vestibule
- Connected to main circulation corridor but not open to it
- Direct access to Workroom / Mailroom
- Visual supervision of Health Suite from reception desk and Secretary's Office

Considerations
- Natural daylight
- Not easily visible from student corridor
- Reception desk designed to accommodate two staff members
- Provide a lockable sliding window between the Secretary's Office and Reception

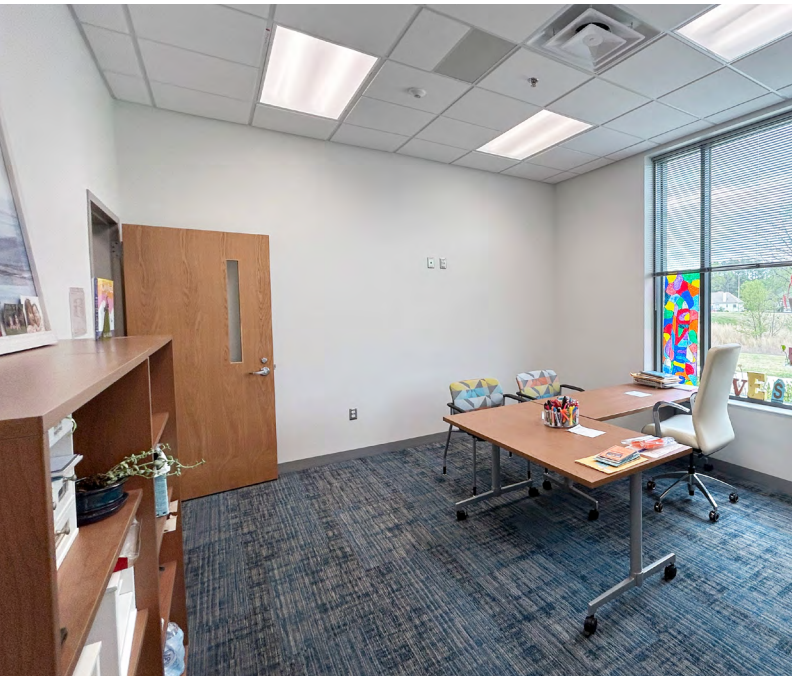


Principal's Conference

Activities
» Internal, departmental team meetings
» Command Center for emergency operations / response
» Training sessions
» Presentations (digital with sound), in-person, and virtual meetings; brainstorming sessions
» Testing

Access
» Near Reception
» Direct access to Principal's Office
» Direct access to Administration corridor

Considerations
» Requires visual and acoustical privacy with limited visibility to corridor
» Comfortable and inviting atmosphere to promote meaningful, honest conversations
» Room should be rectangular in shape to accommodate long conference table

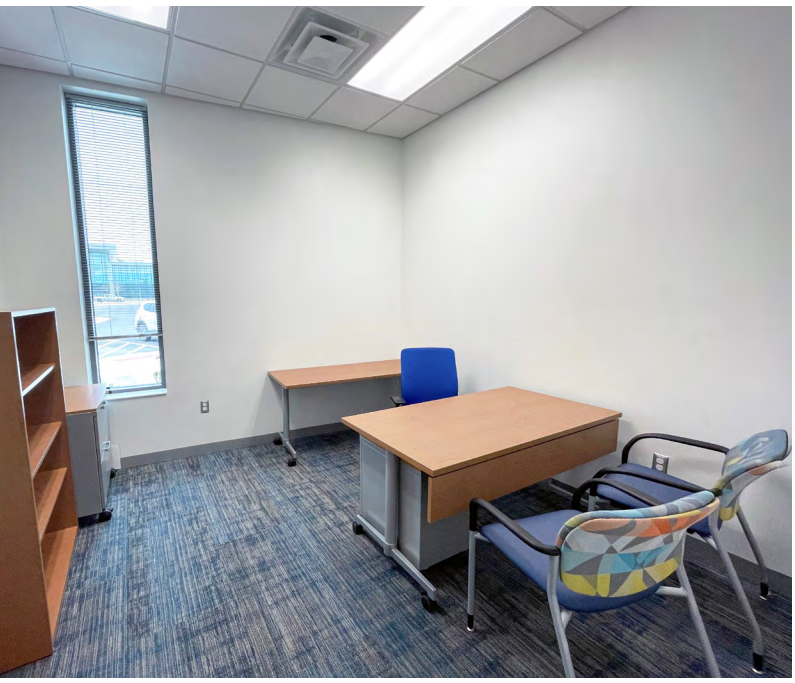


Principal's Office

Activities
» Workstation for individual work
» Meetings with students, parents, and staff
» Working with confidential material or files

Access
» Corridor or circulation path to Student Support Services
» Near Secretary and Assistant Principals' offices
» Direct access to Principal's Conference
» Located in a quiet, low-traffic area
» Provide second means egress from Administrative suite to avoid having to go through Reception

Considerations
» Confidentiality is critical, so the room should have good sound insulation and a sidelight for limited visibility to the Administration suite corridor
» The office should have views to front of school and approach to main entry for passive supervision of site
» Comfortable and inviting atmosphere to promote meaningful, honest conversations



Offices

Assistant Principal, Secretary, Lead Teacher, Student Information and Data Manager

Activities

» Workstation for individual work
» Meetings with students, parents, and staff
» Working with confidential material or files

Access

» Corridor or circulation path to Student Support Services
» Near Reception
» Near Principal's Conference
» Located in a quiet, low-traffic area

Considerations

» Confidentiality is critical, so the room should have good sound insulation and a sidelight for limited visibility to the corridor, see Master Charts
» The Secretary's office should have a lockable sliding window into Reception and visual connection with the Health Suite
» The SIDM office should be adjacent to the Records Room for accessing and recording student information and attendance



PTA Office / Storage

Activities

» Preparation of PTA correspondence, storage of supplies, planning, and meetings

Access

» In the main corridor near the main entrance
» Visibility from / to main corridor
» Does not need to be near the Administration suite

Considerations

» Shelving for storage of various and changing materials, see Master Charts



Health Suite

Activities
» Waiting area for sick or injured students
» Medical consultation and examinations with students and families

Access
» Adjacent to Reception desk for direct supervision
» Adjacent to Medicine Dispensary
» Direct access to Health Suite Toilet
» View from Secretary's Office and Reception

Considerations
» Shall include a single cot with privacy curtain
» See Master Charts for casework requirements



Medicine Dispensary

Activities
» Storing and dispensing medicine

Access
» Adjacent to Health Suite

Considerations
» 4-drawer locking file cabinet
» First Aid supplies
» See Master Charts for casework and under counter refrigerator requirements
» Room to remain locked except when in use



Records Room

Activities
» Locked storage of confidential student records

Access
» Adjacent to SIDM's (Student Information Data Manager) office for easy access, if possible

Considerations
» Space for a small table, 10 five-drawer file cabinets, 2 chairs, see Room Data Sheets



Supplies Storage

Activities
» Storage of materials and supplies

Access
» Near Reception
» Direct access to Workroom / Mailroom

Considerations
» Storage of teaching and office supplies
» Open shelving for flexibility and ease of finding materials

2

Student Support Services





Student Support Services

The Student Support Services Department is dedicated to fostering a positive and inclusive environment that promotes the academic, emotional, and social well-being of all students. The team of counselors, psychologists, and support staff is committed to providing a range of resources, including academic advising, mental health support, and personal development programs.

They work collaboratively with students, families, and teachers to identify individual needs and create tailored strategies that empower students to thrive both in and out of the classroom. Whether students are facing challenges or seeking guidance, the department is available to help them succeed and reach their fullest potential.

2 Student Support Services

Our Goals

A strong foundation of skills in both academics and **positive self- esteem** by counselor collaboration with **teachers and parents**

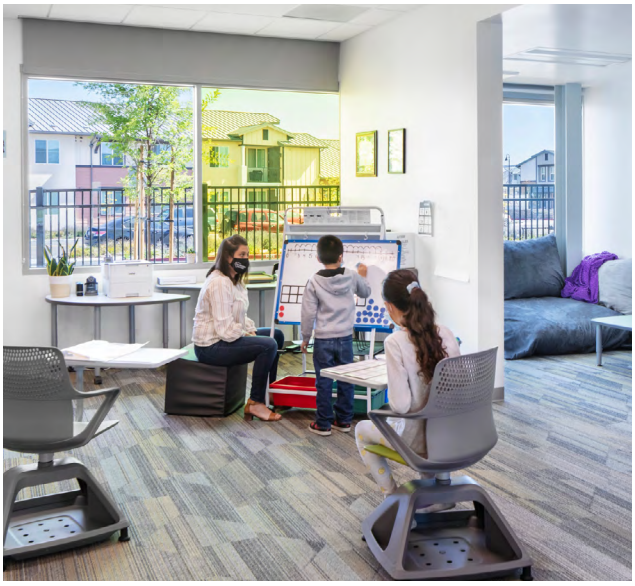
Support Services and **individualized assistance** for students and their families

Access to counselors through classroom sessions on topics ranging from making friends to safety issues

Academic and social emotional success in students to ensure a smooth transition to middle school

We Believe in

- A holistic approach to wellness
- The importance of involving all family members and the whole community in each child's development
- Tailoring our support to the individual needs of each child
- The integration of other community resources into the school
- Early identification of students in need of specialized services, including increased consultation and referral
- Proactive scaffolding and support systems

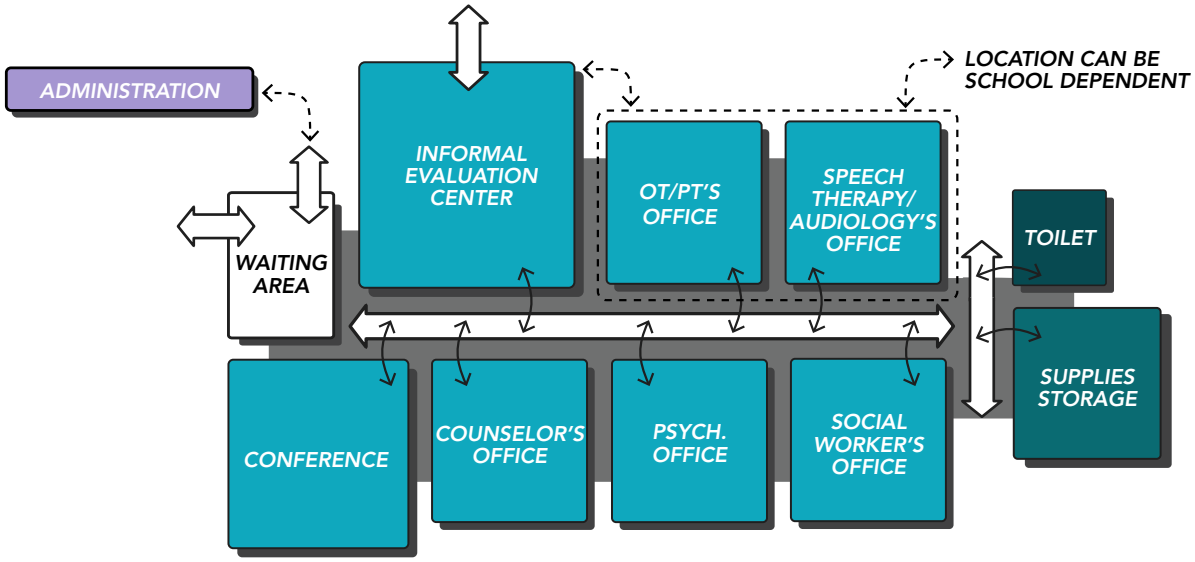


What this looks like

- School Support Services personnel includes speech therapists, audiologists, psychologists, social workers, visually and hearing-impaired specialists, occupational therapists, and physical therapists. They do testing, make assessments and deliver services to identified students. These could include one-to-one assistance, group counseling, parent/family consultation and counseling, parent support groups, and family-living education seminars
- Human Services professionals based in schools include a nurse and social workers. These professionals make preliminary assessments, referrals and provide direct counseling and consultation to students and their families
- School-based counselors meeting regularly with teams of teachers to discuss how a child's physical, emotional, and intellectual development needs to interrelate with their academic development
- Counselors work with students in classroom groupings, smaller groups and individually. Specialized services are provided for students with identified needs
- Providing information to children and families, then assessing and creating a support plan in collaboration with parents, teachers, and consultants



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Located near the front entry, connected or adjacent to the Administration, but with its own entrance for students

2 Selected finishes should create a warm, friendly, calming atmosphere

3 Signage and graphics on the interior main corridor wall may improve wayfinding and create a welcoming atmosphere

4 Students should feel that they have easy, positive access to caring adults, separate from the functions or disciplinary actions typically associated with the Admin Office

5 Consider sound management in office space planning to ensure privacy for confidential conversations



Waiting Area

Activities
» Entry to suite
» Waiting to see specialist

Access
» Connected to main circulation corridor but not open to it
» Near Conference and Offices
» Direct connection or adjacent to the Admin suite

Considerations
» Provide seating for 2-5
» Not visible to main corridor outside the cluster of spaces
» Supervisable



Informal Evaluation Center

Activities
» Working with students in a circle group
» Touch-down spot for itinerant specialists and service providers
» Calming area/room for self-regulation or informal, relaxed conversation (can go to nearby conference room for confidential discussion)
» Large meetings (IEP)

Access
» On main corridor, near Waiting Area with visibility
» Near OT/PT and Speech Therapy / Audiology
» Near Conference

Considerations
» High visibility into space
» Warm & welcoming
» Adjustable lighting
» Ensure speech privacy of enclosed office spaces and minimize sound transmission between spaces



Conference (Student Support Services)

Activities
» Internal, departmental team meetings
» Meetings with parents, student and specialists/service providers to discuss support plan
» Training sessions
» Presentations (digital with sound), in person, and virtual meetings; brainstorming sessions (with white boards)
» Testing

Access
» Easily accessible to parents and student from Waiting Area
» Near Offices and Informal Evaluation Center

Considerations
» Warm and welcoming
» Digital projection with sound, and virtual meetings; brainstorming sessions (with white boards)
» Sound insulated



Supplies Storage

Activities
» Storage of materials and supplies

Access
» Corridor connecting offices, Conference and Informal Evaluation Center

Considerations
» Adjustable shelving, see Master Charts
» Sidelight or window in door for flexibility



Offices

Counselor, Social Worker, Psychologist, OT/PT, Speech Therapy/ Audiology

Activities

» Focused individual work, confidential phone calls, individual virtual meetings
» Confidential discussion with student, parents, and teachers
» Individualized testing

Access

» Corridor or circulation path to Administration
» Located in a quiet, low-traffic area
» Near conference room, toilet room
» *Not* directly adjacent to Waiting Area
» Next to other specialist offices (cluster of offices for collaboration)

Considerations

» Confidentiality is critical, so the room should have good sound insulation and a sidelight for limited visibility from the corridor
» Artificial lighting should be adjustable
» Furnishings and atmosphere should be comfortable and inviting to promote meaningful, honest conversations
» The office is not necessarily intended to be “owned” by one person but shared at different times, whenever someone needs a quiet or confidential space
» Ensure speech privacy of enclosed office spaces and minimize sound transmission between spaces
» Interchangeable signage

2 Student Support Services

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3

Pre-Kindergarten





Pre-Kindergarten

Wake County Public School System (WCPSS) offers early childhood programs for children aged 3 to 5 years old. These programs are delivered within a learning model designed to ensure direct access to restrooms and outdoor playgrounds, and are compliant with federal, state, and local licensing standards. These program offerings provide many benefits to students who are enrolled as shown / proven by studies which have repeatedly concluded that children who were enrolled in a high-quality preschool program perform better in kindergarten, respect authority, graduate from high school, and become contributing members of society.

3 Pre-Kindergarten

Our Goals

Provide an environment which allows the young child to **engage in various active learning stations**, either alone or with other children

Comply with IDEA (Individuals with Disabilities Education Act), **FAPE** (Free and Appropriate Public Education), and **North Carolina Preschool licensure requirements**

We Believe in

- Intentional and inclusive environments to support a variety of behavioral, emotional, and learning needs
- The importance of socio-emotional learning and awareness
- Promotion of multi-culturalism and understanding of diversity
- Focus on early literacy development
- Early identification and intervention support for diverse learners

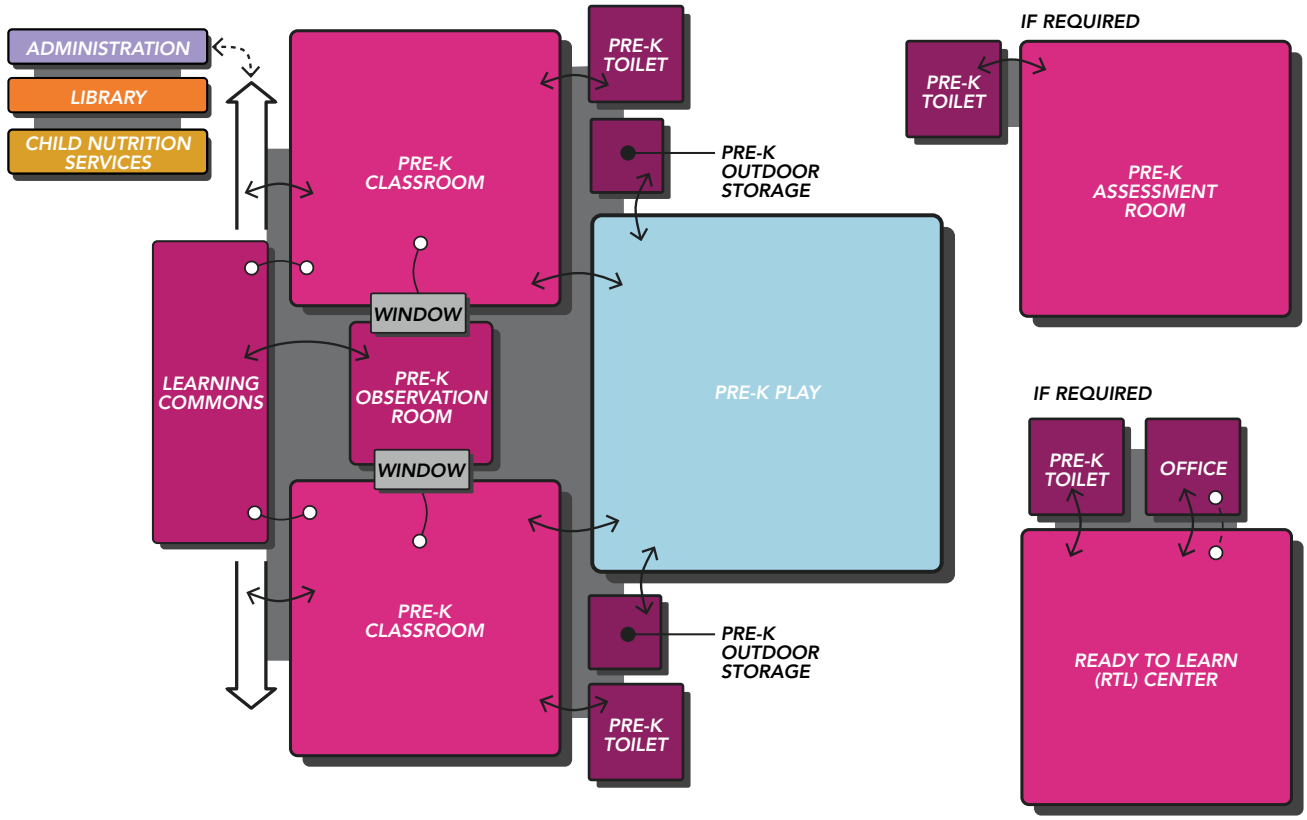


What this looks like

- Instruction focused on developing students' fundamental skills
- Appropriate use of technology to support learning
- Collaborative teaching
- Play-based assessment and instruction in natural/ functional environments
- Provision of related services with a collaborative, integrated learning approach
- Flexibility for multiple modes of teaching and learning
- Hands-on activities that are engaging for many types of learners
- Learning through lots of movement and outdoor time
- Free play and independent learning
- Low-stress environments with relaxing areas
- Sensory play activities in many parts of the classroom, both indoors and outdoors
- Integrated support services
- Optimized daylighting and views of nature in seating areas



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 All Pre-Kindergarten spaces should be located on the ground floor

2 All Pre-Kindergarten classrooms are to be close to bus and car drop-off and pick-up, Administration, Library, and Multi-purpose room, and other core areas to reduce travel time and preserve instructional time

3 The Pre-Kindergarten classrooms are to be grouped together around or near a shared Learning Commons

4 Each classroom shall have direct access to the outdoors into a fenced Pre-Kindergarten area. Provide some sun protection areas, within a fence for various play opportunities

Pre-Kindergarten



Pre-K Classroom

Activities
- Whole group, small group, and individual instruction
- Ability to support a variety of educational strategies and approaches
- Eat meals and snacks in classroom

Access
- Situated in a location within the building that provides easy access to outdoor, gymnasium, Library, and other spaces that support teaching and learning
- Direct access to Pre-K Toilet and Pre-K Outdoor Play

Considerations
- A large open floor space to accommodate large group activities, direct instruction, dramatic play, music and rhythms and large muscle activities
- Areas for active play, quiet play, and rest. Cots or mats will be used for rest periods
- Learning centers to be set aside for specific activities and can include art, block building, math, science, music and movement, writing, housekeeping, sand and water, puzzles, and sensory/motor activity skills
- Attention to the scale of elements in the classroom
- Ample storage to accommodate materials and supplies
- Ability to be locked down in the event of an active threat or a drill
- Visibility into Learning Commons
- Daylighting and views of nature. Spaces should be light-filled and welcoming
- Locate activity sink within casework area. Student activity sinks must be easily accessible by small children
- Unlocked cabinetry should be above 5 feet
- At least 1/3 of the floor area should be non-carpeted for wet or student activities



Pre-K Observation

Activities

» Unobtrusive observation into Pre-Kindergarten classroom

Access

» Direct access from corridor

Considerations

» Adjacent to both Pre-K Classrooms
» One-way glass into classrooms, low enough for 3-4 people to sit at desk writing observations but still able to see into Pre-K Classrooms
» Volume-adjusting sound system with speaker to listen into classrooms
» Some acoustical privacy



Pre-K Toilet

Activities

» Bathroom (toilet and sink) and changing area

Access

» Direct access from Pre-K Classroom

Considerations

» ADA accessible/barrier free
» Small cabinet for storage of personal supplies, changing station, and portable adaptive toilet chair. See Master Charts for requirements
» Required heights for Pre-Kindergarten



Learning Commons

Activities

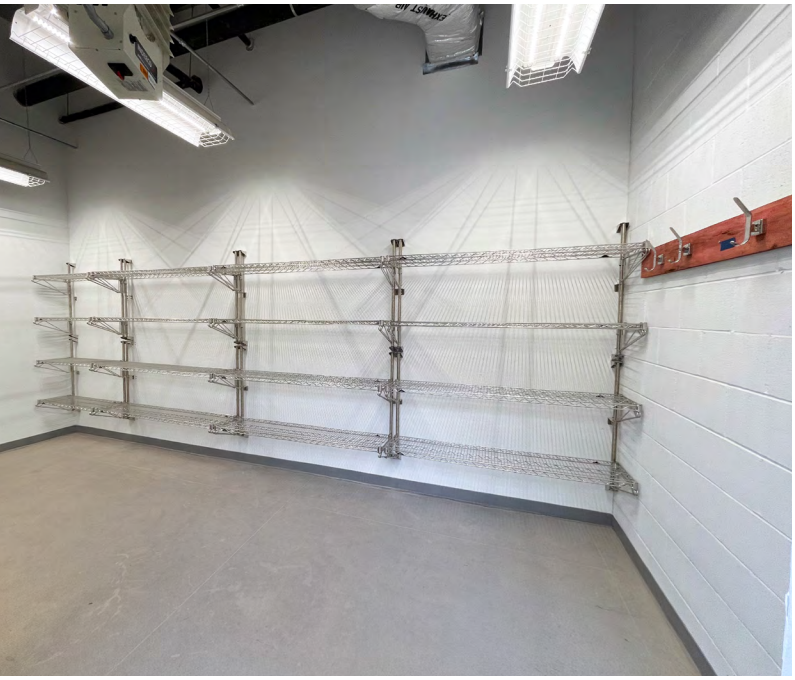
» Small group pull-out space
» Gross motor skill activities

Access

» Direct access or near Pre-K Classrooms

Considerations

» Large open space with durable flooring and daylighting
» Visibility from Pre-K Classrooms



Pre-K Outdoor Storage

Activities

» Storage of play supplies and materials

Access

» Proximity to Pre-K Classrooms
» Direct access to Pre-K Playground

Considerations

» Lockable Storage
» Within fenced area
» Series of heavy duty hooks, see Master Charts



Pre-K Assessment Room
(IF REQUIRED BY WCPSS)

Activities
» Testing of students' abilities and capabilities
» Similar activities to Pre-K Classroom

Access
» Direct access to Pre-K Toilet
» Near the Pre-K Classrooms

Considerations
» Similar to Pre-Kindergarten classroom but with workstations



Ready to Learn (RTL) Center
(IF REQUIRED BY WCPSS)

Activities
» Variety of early childhood learning experiences through a supportive and cooperative partnership between families and early childhood professionals
» Parent/child developmental play groups
» Developmental screenings
» Parent education
» Referrals to community programs and agencies

Access
» Near the main entrance and Administration
» Direct access to an Office and Pre-K Toilet

Considerations
» Similar to Pre-Kindergarten classrooms
» See Master Charts for requirements

4

Learning Neighborhood & Learning Commons





Learning Neighborhood & Learning Commons

The Learning Neighborhoods approach breaks down the scale of the school, making it more manageable and personal for students. It fosters a sense of community among students, teachers, and parents, creating a supportive and collaborative learning environment.

This approach provides numerous opportunities for collaboration, both for students and teachers. Students can work together on projects that encourage creativity and problem-solving, while teachers can share resources and strategies.

Active learning is a key component of Learning Neighborhoods. Through project-based learning, students engage in hands-on activities that reinforce classroom lessons and develop critical thinking skills. These projects often result in presentations where students demonstrate their real-world learning and content knowledge.

Learning Neighborhoods also offer flexibility in terms of class size. Teachers can gather multiple classes for large group activities or work with small groups for more focused instruction. Learning Commons area allocations offer the ability to adapt program spaces within and outside of the Learning Neighborhood to support these activities. This adaptability allows for personalized learning experiences that cater to the diverse needs of students. Overall, Learning Neighborhoods cultivate a dynamic and engaging learning environment that prepares students for the future.

Learning Neighborhood

Our Goals

Instill a **love of learning** in all students

Inclusion of all students into a shared learning experience

Increase emphasis on **individual student needs**

We Believe in

- Providing an environment which allows the young child to be active, vigorous and freely moving
- Achieving a high degree of self-discipline and individual responsibility, enabling students to become effective, responsible citizens
- Providing science curriculum that ensures each child will be scientifically literate. The child's first experiences with science should involve aspects of experimental inquiry. Laboratory and fieldwork are very important
- Providing mathematics curriculum in a manner in which students experience the joy and fascination of mathematics as they gain mathematical power
- Providing social studies curriculum that prepares students to not only formulate their own attitudes, values and concepts; but also learn how to apply this knowledge to situations in their personal and public lives
- Providing an elementary language arts program that develops each student's ability to read and write effectively and independently
- (For General Ed Support Classrooms) Providing an appropriate environment for instruction outside regular classroom activities. These rooms could be used for AIG, foreign language, etc.

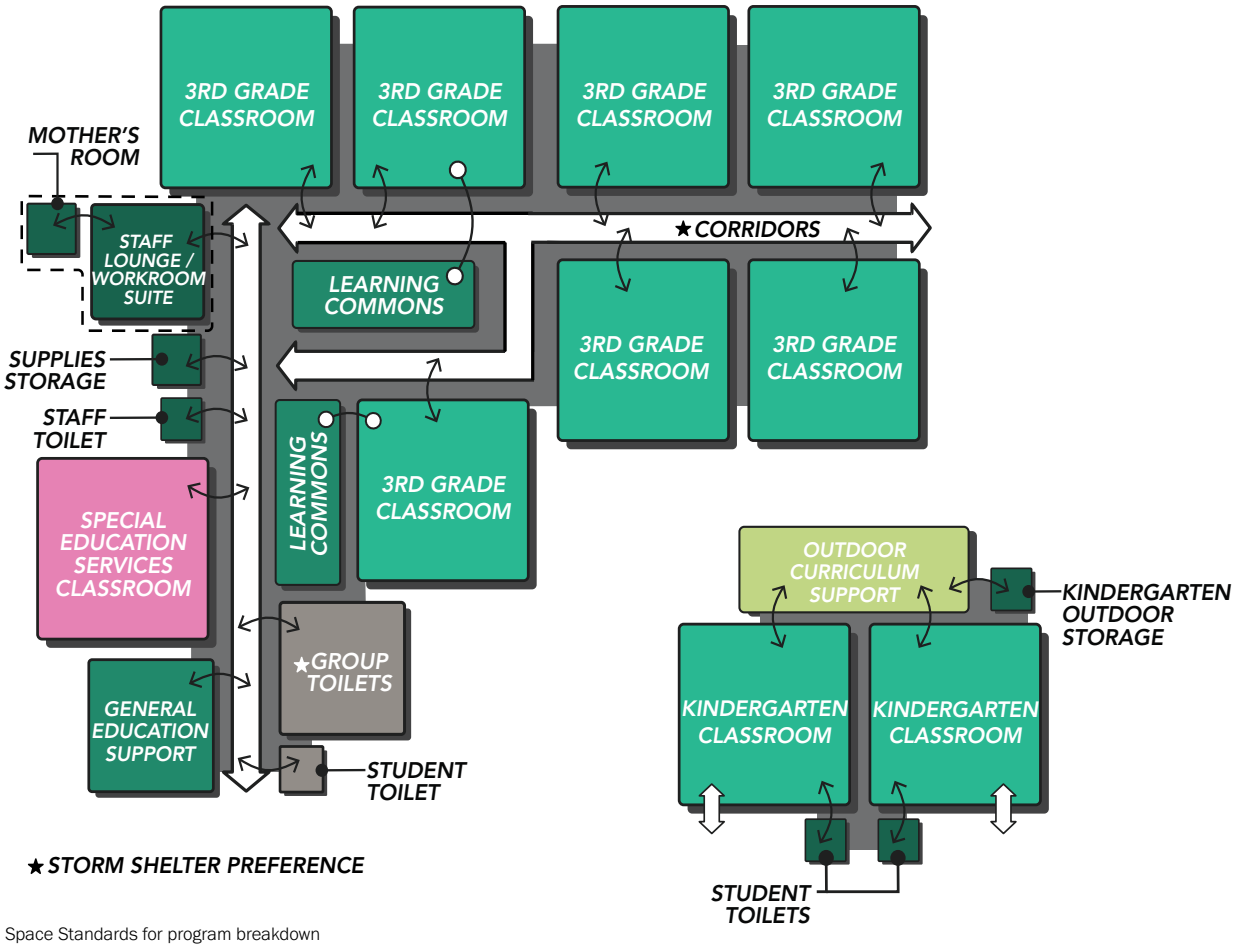


What this looks like

- Integrated and active learning in a variety of settings and educational modalities
- Student choice and agency to increase engagement and deepen learning, from where they may choose to sit or work to the topics of content they choose and the method of displaying their learning
- Students working independently, in pairs, in small groups and large gatherings
- Student presentations or demonstrations of their learning to deepen content knowledge and develop confidence



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Neighborhood groupings of classrooms should be in the academic wings of the school but relatively close to bus and car drop-off / pick-up, Administration, Library, Dining Commons, and Multi-Purpose Room, with youngest grades being the closest to these areas

2 Pre-K, Kindergarten, and occasionally 1st grade Classrooms can be arranged as one neighborhood and must be on the ground floor, with a single-user toilet and direct access to the outdoors from each classroom. Kindergarten classrooms utilize the adjacent outdoor area as part of center-based instruction

3 2nd and 3rd grade classrooms form one neighborhood. 4th and 5th grade classrooms form one neighborhood and should be located as far as possible from Pre-K, Kindergarten, and 1st grade Classrooms

4 Staff spaces are located within Learning Neighborhoods to support staff while still supervising students, see Space Standards



Pleasant Plains Elementary | Photo by Susan Holt

General Classroom

1st, 2nd, 3rd, 4th, 5th

Activities

» Independent work, large group instruction, debates, dramatization, small group activities (6-7 students), medium size instruction (1/2 class), role playing, video-recording, collaborative work (2-3 students)

Access

» Near ECS / Specialized Programs Classrooms
» Pre-K, Kindergarten, and 1st Grade: Student Toilet within each classroom
» 2nd-5th Grades: Near Group Toilets
» Direct and visible access to Learning Commons

Considerations

» Most activities require a combination of individual tables with chairs and worktables permitting multiple use of the space
» Laptop usage anywhere in the room
» Where feasible, provide connecting doors between classrooms in groups of two classrooms
» Daylighting and students' views of nature from standing or sitting height
» Visual connection with outdoors and with learning commons and spaces within the Neighborhood to build community and provide supervision
» Colors and finishes that provide a warm and friendly atmosphere
» Ample wall space for display, white boards, and cabinetry

Teaching Wall

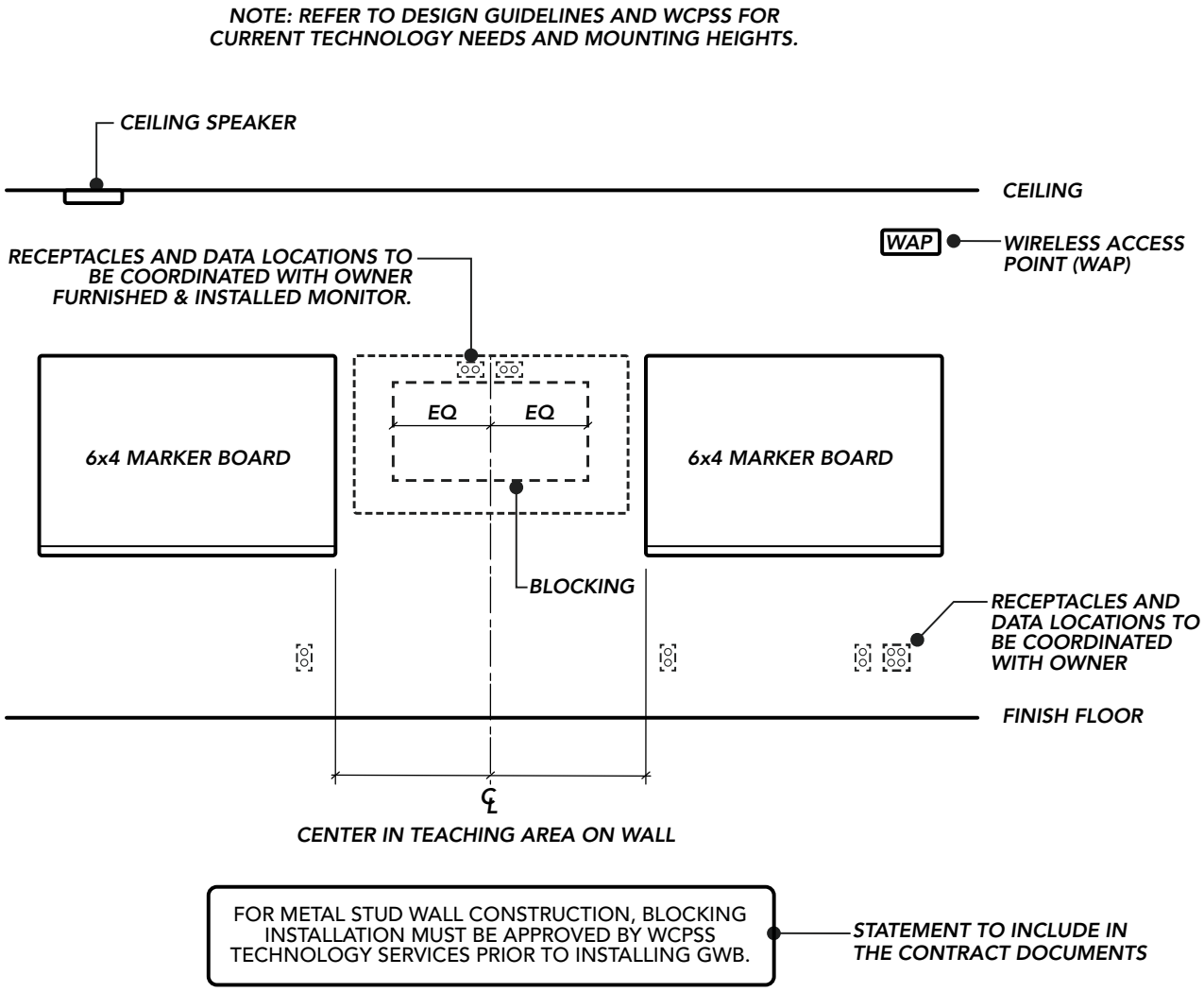


Fig. 1 - Teaching Wall

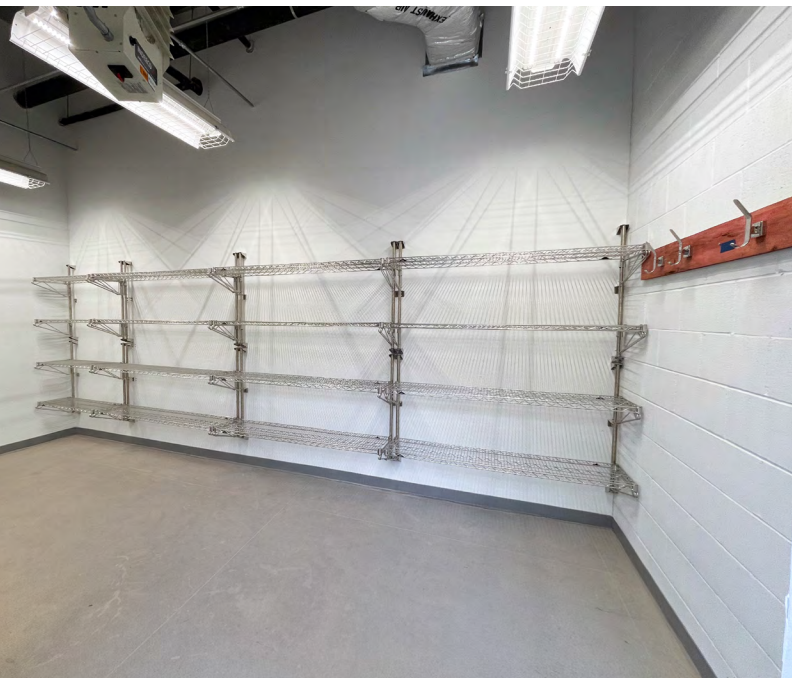


Kindergarten Classroom

Activities
- Large group activities, direct instruction, dramatic play, music and rhythms, larger muscle activities
- Desk work for math, writing, art, puzzles
- Learning Centers for specific activities such as reading, art, block building, science, music and movement, modality instruction, painting, etc.

Access
- Direct and visible access to Learning Commons
- In the same neighborhood grouping with 1st grade classes
- Student Toilet located within each classroom
- Direct access to exterior

Considerations
- Must meet current DPI standards
- Large, open floor space for large group activities, circle time, and physical movement activities
- Easy to clean surfaces that encourage creative, sometimes messy, play and exploration
- Scale of spaces and cabinetry to small children
- Supervisable, but cozy nook for independent reading or self-regulation/calming, with view of outside/nature if possible
- Daylighting and students' views of nature from standing or sitting height
- Colors and finishes that provide a warm and friendly atmosphere



Kindergarten Outdoor Storage

Activities
» Storage of play supplies and materials

Access
» Proximity to Kindergarten Classrooms

Considerations
» Lockable Storage
» Within fenced area
» Series of heavy duty hooks, see Master Charts



Student Toilet

Activities
» Single-user or assisted restroom for Elementary Students

Access
» Direct access to classroom

Considerations
» ADA accessible/barrier free
» Ventilated with switch control
» Portable adaptive toilet chair
» Required heights for Elementary based on grade



General Education Support

ESL/AG/Literacy

Activities

» Variety of functions including small group activities and individual work outside of the classroom

Access

» Near Learning Commons
» Adjacent to General Classrooms

Considerations

» Daylighting and students' views of nature from standing or sitting height
» Visual connection with outdoors and with Learning Commons and spaces within the Neighborhood to build community and provide supervision
» Colors and finishes that provide a warm and friendly atmosphere
» Ample wall space for display, white boards, digital projection and cabinetry



Professional Learning / Collaboration

Activities
» Relaxed, collaborative environment
» Storing, warming, and consuming food
» Connecting with other staff in informal setting
» Individual regrouping, rest, or reflection

Access
» Near a Staff Toilet
» Near or within a Learning Neighborhood

Considerations
» Warm and relaxing atmosphere
» Daylighting with views of nature, if possible



Staff Lounge / Workroom Suite

Activities
» Relaxed, collaborative environment
» Storing, warming, and consuming food
» Connecting with other staff in informal setting
» Individual regrouping, rest, or reflection

Access
» Accessible to all grade levels
» All-user, staff toilet room
» Direct connection to outdoor, private patio

Considerations
» Warm and relaxing atmosphere
» Daylighting with views of nature, if possible
» This space can be distributed in 2-3 locations



Mother's Room

Activities
» Private room for staff

Access
» Located within the Staff Lounge / Workroom Suite

Considerations
» Cabinet with sink and under-counter refrigerator, see Master Charts



Year-Round Teacher Cart Storage

Activities
» Storage of mobile carts and equipment

Access
» Direct access off main corridor

Considerations
» Storage may be broken into 2 or more rooms as long as cart dimensions are considered and carts can be equally distributed
» One wall of shelving, see Master Charts



Supplies Storage

Activities
» Storage of grade level books and other instructional materials

Access
» Within Learning Neighborhoods
» Provide one Supplies Storage at each grade area, see Space Standards

Considerations
» Room typically rectangular in shape to accommodate perimeter and central shelving
» See Master Charts for shelving requirement



Multi-Purpose Classroom

Activities
» Similar to General Classrooms but for unassigned staff use
» Whole group instruction as well as small group activities
» Teacher professional learning and training (PLT)
» Potential location for Learning Commons functionality

Access
» Direct access from corridor

Considerations
» See General Classrooms for considerations



Conn Magnet Elementary School, Clark Nexsen

Magnet Exploratory Lab

(IF REQUIRED BY WCPSS)

Activities

- Low-infrastructure and flexible space that supports a variety of magnet programs
- The Magnet Exploratory Lab is closest, in use and infrastructure, to a maker space or learning activity space
- Direct instruction that creates a relationship between core academics and technical skill development
- The curriculum is student-centered, competency-based, applied, integrated learning that focuses on developing literacy, math, science, technology, critical thinking, problem-solving, and teamwork skills

Access

- Direct access from corridor
- Activities in these labs may benefit from access to the outdoors
- Consider close proximity to Magnet General Classroom for direct instruction learning

Considerations

- Classrooms and low bay spaces should be large enough to accommodate furniture and equipment required
- Ample space for storage of supplies, materials, and projects should be provided near learning spaces
- Instructional spaces should be proportional for effective viewing and listening from all areas of the room
- Coordinate with WCPSS for program-specific needs based on Magnet school theme and program



Magnet General Classroom

(IF REQUIRED BY WCPSS)

Activities

» Similar to General Classrooms but for unassigned staff use
» Whole group instruction as well as small group activities
» Innovative instructional models
» Coordinate with WCPSS for program-specific needs based on Magnet school theme and program

Access

» Direct access from corridor

Considerations

» See General Classrooms and coordinate with WCPSS for considerations



Flexible Capacity Classroom

(IF REQUIRED BY WCPSS)

Activities

» Similar to General Classrooms and used for building expansion to accommodate a growing population of students

Access

» Direct access from corridor
» Plan for smooth pedestrian, vehicular, and service access across new and existing facilities

Considerations

» Flexible Capacity should prioritized as additional classrooms within the building. Otherwise, a classroom addition can be considered, and lastly, flexible capacity mobile units
» The planning for future building expansion shall consider grading, circulation patterns, and utility stub outs

4 Learning Commons

Our Goals

Provide a **variety of spaces** for student learning beyond the classroom

Provide **special learning programs** unique to each school

High visibility of spaces

We Believe in

- Providing an environment which allows the young child to be active, vigorous and freely moving
- Tailoring Learning Commons to each school's unique culture, community, and educational goals
- Exploring new ideas, tools, and technologies that go beyond the traditional classroom
- Connecting knowledge by integrating science, technology, engineering, arts, and math in meaningful ways
- Supporting well-being by offering change, comfort, and environments that reduce stress and increase focus
- Encouraging adaptability by navigating diverse learning spaces and situations

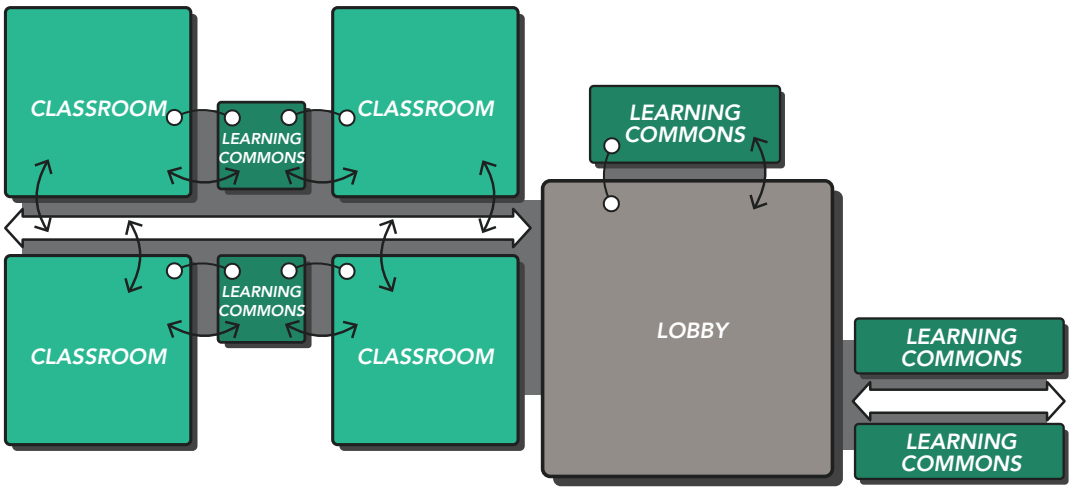


What this looks like

- Distributed spaces throughout the school
- Supervised fluidity of movement between classrooms, learning commons, or small group rooms, as appropriate to the age group
- Integrated and active learning in a variety of settings and educational modalities
- Students working independently, in pairs, in small groups and large gatherings
- Quiet corners for digital storytelling, video editing, and media creation using tablets and laptops
- Open areas with movable furniture that support group work, brainstorming, and project-based learning
- A space that evolves over time to meet new learning goals, technologies, and student interests
- Teachers and support staff guiding students through inquiry-based activities outside their classroom



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Learning Commons area allocations offer flexible space that can be utilized for various purposes including but not limited to classroom breakout space, special learning programs unique to each school, or adjacent to key circulation spaces

2 For younger grades, small group rooms are most appropriate with direct and visual connection to the classroom

3 For older grades, other Learning Commons types can be explored while still maintaining supervision

4 Consult with WCPSS for Learning Commons unique to each school

Classroom Breakout

Activities

» Expand beyond the defined General Classroom and offer a variety of seating, learning, and working spaces
» Project based learning activities, including construction or applied learning
» Collaborative learning and working spaces for individuals, small groups and large groups, used by both student and teacher groups
» Specialists working with small student groups
» Direct instruction to multiple (or all) classrooms in the Learning Neighborhood

Access

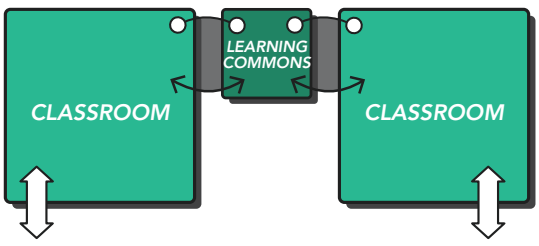
» Direct and visual access to classrooms
» Learning Commons for Kindergarten, 1st, 2nd and 3rd grade works better as small, direct access, supervised, and controlled areas
» Learning Commons for 4th and 5th grade can be an extension of the classroom, or breakout areas outside or attached to the classroom

Considerations

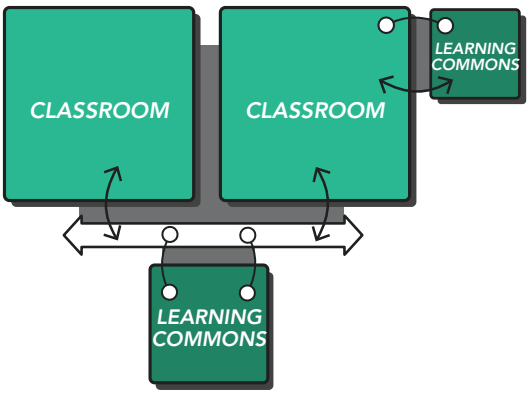
» All Learning Commons must be visually accessible to classrooms or open to the corridor
» High visibility into Small Group
» High visibility and direct connection into classrooms to promote ample supervision and ease of use
» Shared teaching/learning space for all classes in the Learning Neighborhood
» Flexible configuration and connection to classrooms, space can be variety of shapes to meet the needs of that Neighborhood to promote collaborative learning
» Ideally, restrooms for students in a single neighborhood are located within this commons area
» Good sound attenuation to compensate for potentially loud gatherings
» Learning Commons should offer a different experience than each other and from a classroom experience

Space Adjacency Examples

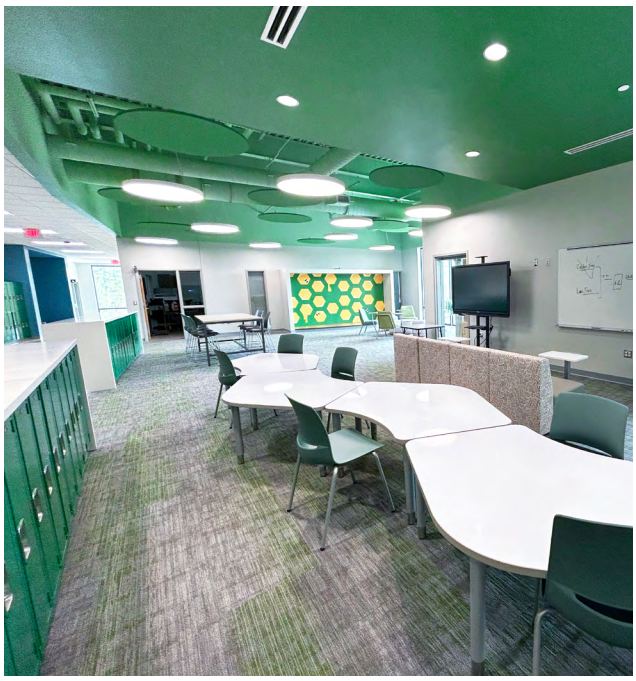
KINDERGARTEN, 1ST, 2ND, AND 3RD GRADE



4TH AND 5TH GRADE



4 Learning Commons







Pleasant Plains Elementary | Photo by Susan Holt

Special Learning Programs

Activities

» Unique, school-specific program to enhance the learning environment, coordinate with WCPSS
» Some examples include but are not limited to maker spaces, digital learning labs, and STEM labs. Other examples include adding on to other programs in the school such as the Art Classroom, Music Classroom, Library, Physical Education, etc.
» Collaborative learning and working spaces for individuals, small groups, large groups, or full class instruction

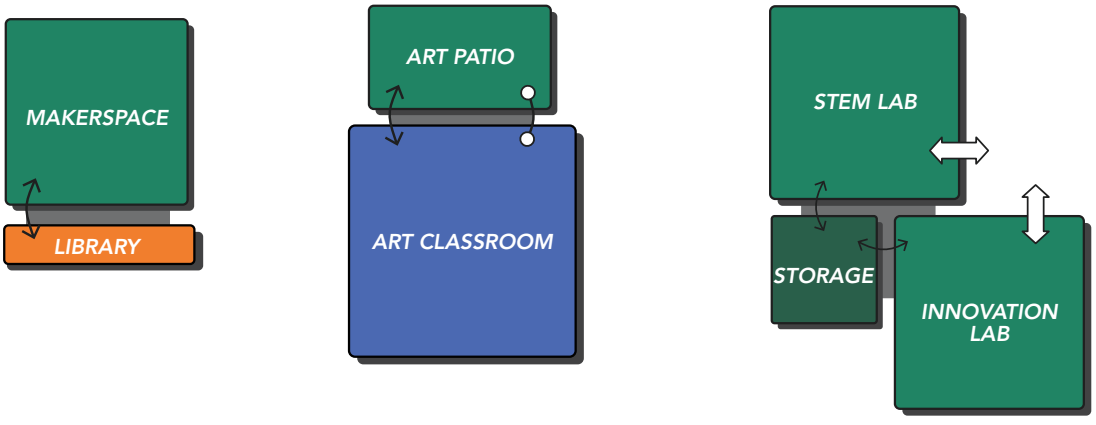
Access

» Coordinate with WCPSS for access needs
» Near group toilets

Considerations

» Work with WCPSS to determine Learning Commons types desired for the school
» Learning Commons should offer a different experience than each other and from a classroom experience
» All Learning Commons must be visually accessible
» Shared teaching/learning space for all classes in the Learning Neighborhood
» Visual connection with outdoors and ample daylighting into space
» Good sound attenuation to compensate for potentially loud gatherings

Space Adjacency Examples



4 Learning Commons







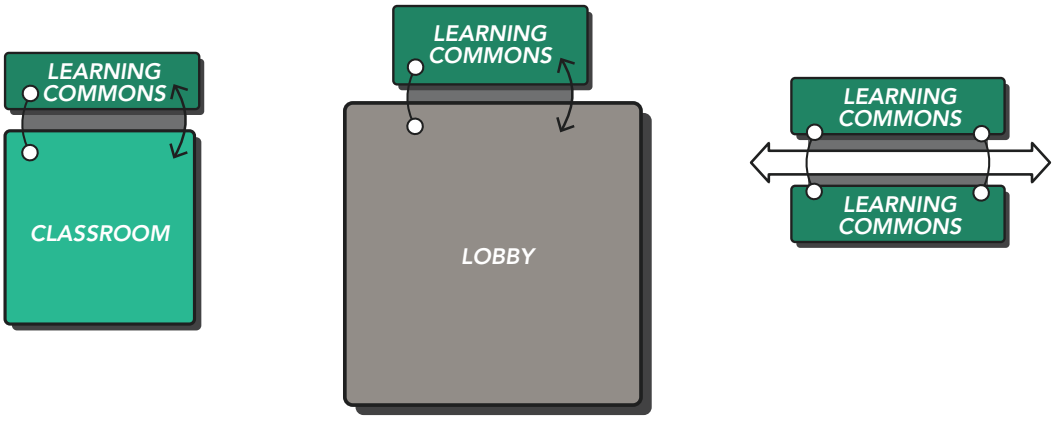
Circulation Space

Activities
- Expand beyond the defined General Classroom and offer a variety of seating, learning, and working spaces
- Collaborative learning and working spaces for individuals, small groups and large groups, used by both student and teacher groups
- Specialists working with small student groups

Access
- Direct and visual access from corridor

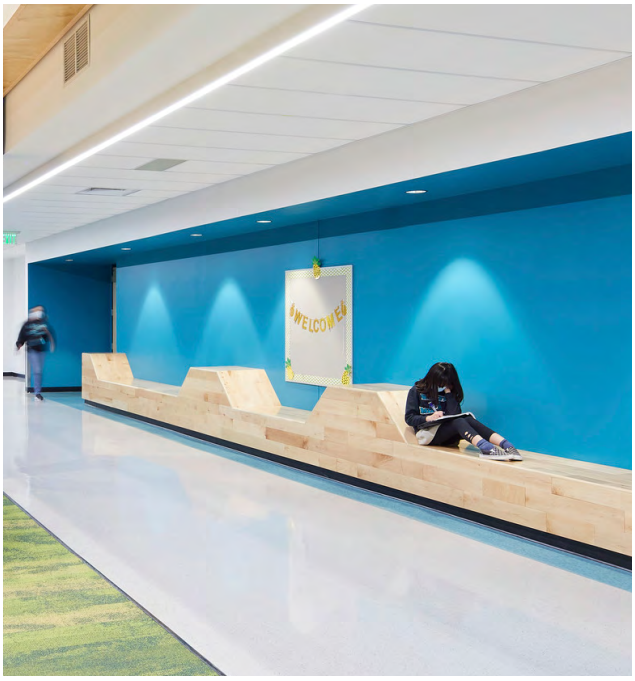
Considerations
- Can create seating areas in lobbies and other gathering spaces
- High visibility and direct connection into classrooms to promote ample supervision and ease of use
- Learning Commons should offer a different experience than each other and from a classroom experience

Space Adjacency Examples



Learning Commons





Pleasant Plains Elementary | Photo by Susan Holt



Pleasant Plains Elementary | Photo by Susan Holt

Outdoor Curriculum Support

Activities
» Independent work
» Small group work and discussion circles
» Movement based activities
» Experiential leaning

Access
» Adjacent to Learning Neighborhoods as an extension of the learning environment where possible
» Consider opportunities for connecting art, science, math, English, or language curriculum to the outdoors
» If secured, provide access control fencing with panic exit hardware

Considerations
» Design Outdoor Curriculum Support spaces with low maintenance landscape plantings for year-round color, visual appeal, and scale appropriate
» Provide plants, boulders and natural elements to support curriculum study units for project based inquiry and data gathering
» May include gardens, tree groupings, small group collaboration, benches, concrete pad, etc.
» Provide open natural grass lawn area
» Design outdoor spaces accounting for teacher supervision and minimizing distractions

Example Outdoor Curriculum Support Types

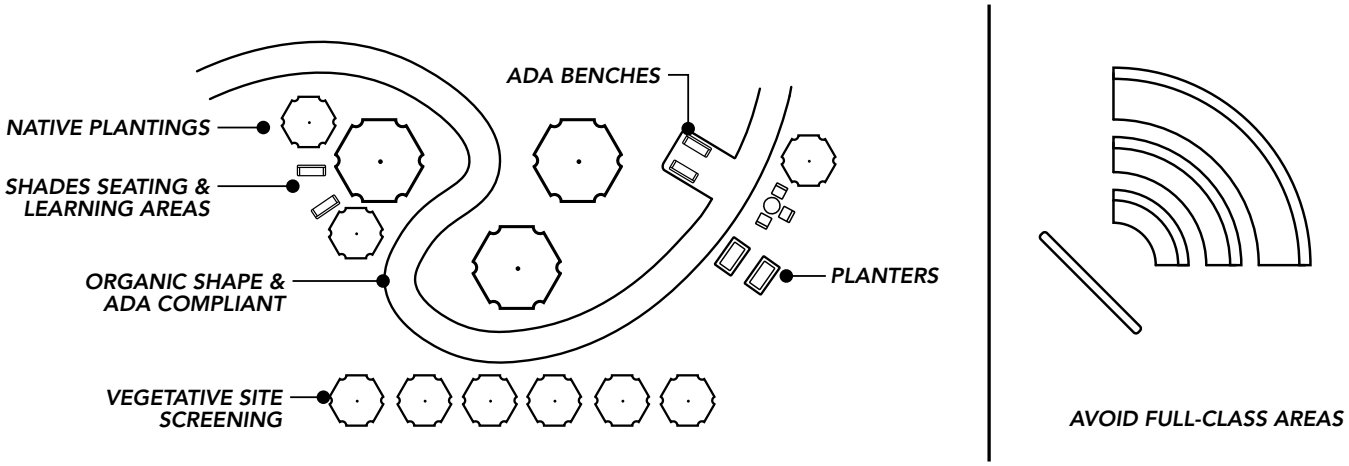


Fig. 2 - Outdoor Curriculum Support

4 Learning Commons







5

Special Education





Special Education

Wake County Public School System provides special education and related services according to federal mandates of the Individual with Disabilities Education Act (IDEA) and the regulations of the North Carolina Public School Law, Article 9.

In addition, the North Carolina Department of Public Instruction, Exceptional Children section provides local educational agencies with detailed procedures for the delivery of special education services. These rules and regulations are detailed in Policies Governing Services for Children with Disabilities. Services are provided under the following areas of eligibility: Autism Spectrum Disorder, Deaf/Blindness, Deaf, Developmental Delay, Serious Emotional Disability, Hearing Impairment, Intellectual Disability, to name a few.

WCPSS makes accommodations for students according to students' Individual Education Plan (IEP) and provides appropriate access to curriculum and learning environments designed to meet the unique needs of the learner. Schools (LEAs) are required to offer services and supports, that start in the Least Restrictive Environment (LRE) and then move across the continuum of alternative placements (General Ed, Resource, Separate, Residential, Home/Hospital) so that all of the students' needs can be met.

Special Education

Our Goals

Comply with the **Individuals with Disabilities Act (IDEA)**

Provide **equitable integrated spaces** through design of the school

Ensure safe, efficient emergency egress from special education classrooms

Ensure that all schools comply with **ADA requirements**

We Believe in

- Providing early intervention, special education, and related services to children with disabilities and specialized need
- Enabling each child to appropriately progress in the general curriculum in accordance with IDEA, supporting students in the least restrictive environment
- Recognizing that all children are unique, learn in different ways, and should have full access to the curriculum. Students with disabilities are not expected to adjust to a fixed education structure; instead, the structure is adjusted to meet the learning needs of each student
- Removing barriers to learning to allow each student to participate fully in the curriculum and feel equally valued

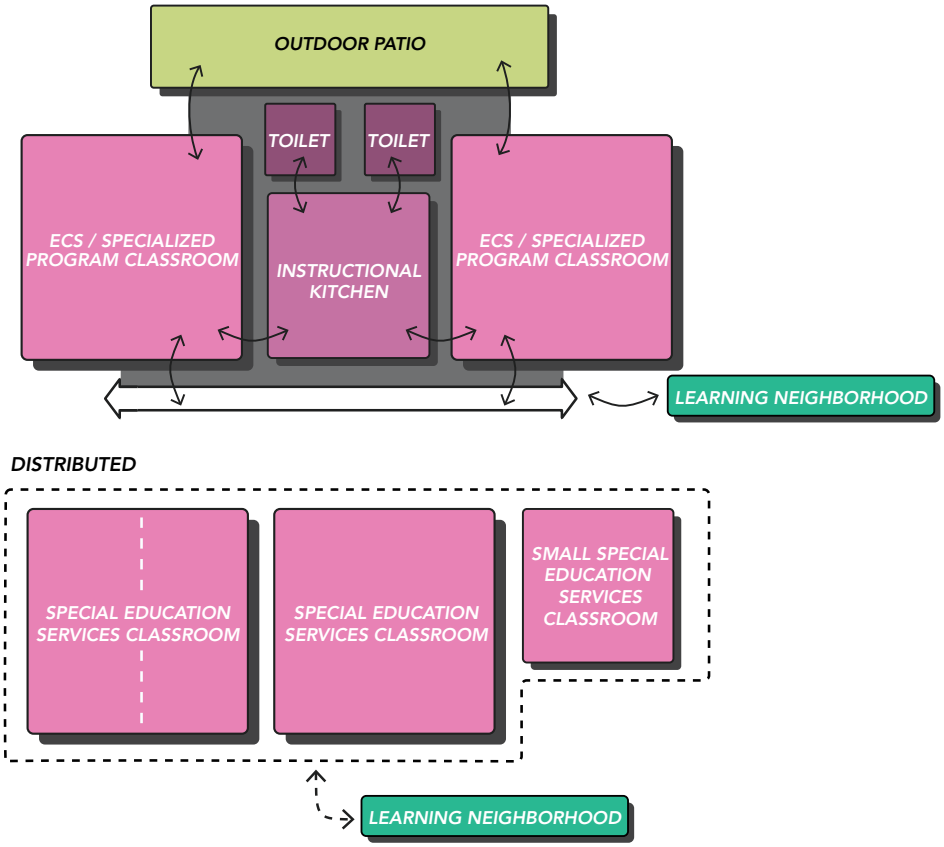


What this looks like

- A self-contained Specialized Education suite, distributed resource classrooms for “pull out” instruction, and adequate physical space within general classrooms for “push-in” specialized instruction
- Push-In Programs: Special Education and related services are provided directly to the student by the Special Education Teacher, General Education, and or any other related service providers or combination of service providers in the General Classroom
- Pull-Out Programs: Special Education and related services are provided directly to the student by the Special Education Teacher and/or any other related service providers outside of the General Classroom within resource classrooms and common areas distributed throughout general education spaces
- Self-contained classrooms may function as the primary educational setting for students who are on an Adapted Curriculum, accommodating diverse activities from daily living and functional skills to specialized behavior and equipment needs. These classrooms require direct access to an instructional kitchen and protected Outdoor Curriculum Support



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Group two ECS / Specialized Program Classrooms with an Instructional Kitchen and toilets between them

2 ECS / Specialized Program Classrooms should be near the major entrance allowing for easy access to the bus and drop -off/pick-up area

3 Provide a partially shaded play area outside of classrooms which can accommodate and support learning opportunities . This area should be fenced or contained

4 Dining Commons, Library, Multi-Purpose Room, and group toilets should have barrier-free access

5 Attention to visual details (diffuse glass, limiting corridor glass etc). It is important to obscure vision into Special Education classrooms

6 Attention to acoustical details (excessive noise, etc.) is important for learners with hearing deficits or sensitivity to sounds

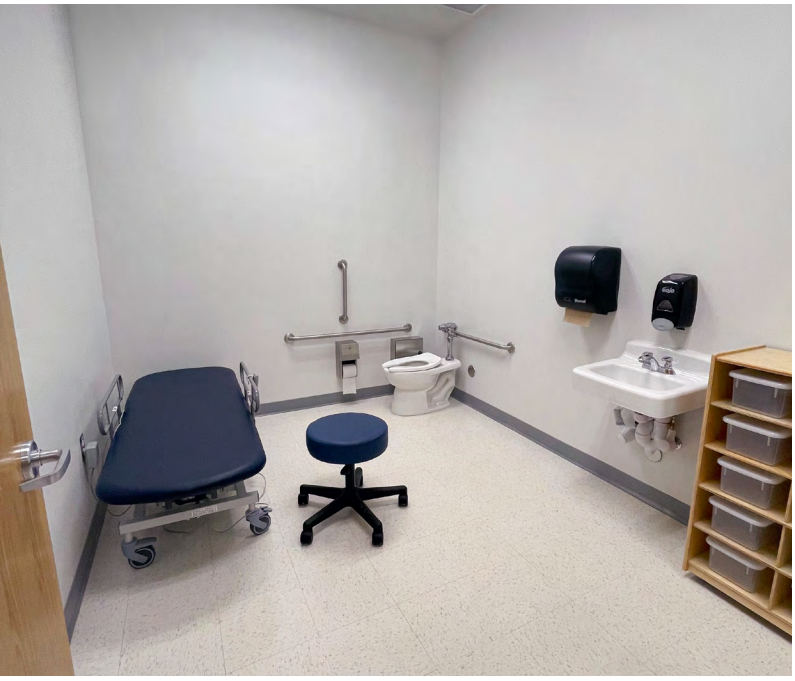


Instructional Kitchen

Activities
» Whole group, small group, and individual instruction
» Life skills, including domestic skills, activities of daily living
» Food preparation and meal consumption

Access
» Direct access or near Specialized Toilets
» Direct access to the corridor or ECS / Specialized Program Classrooms

Considerations
» Dimensional proportion of spaces should support effective viewing, listening, and circulation from all areas of the room
» All aspects of accessibility should be considered
» Clearance for equipment and sizes is crucial. Avoid columns and other obstructions



Specialized Toilet

Activities
» Two separate, accessible toilets between the ECS / Specialized Program Classrooms allow students to gain independence in self-help skills
» Supports special toileting needs or health care procedures that may require privacy
» Storage of health care supplies, bathroom supplies, diapers, etc.

Access
» Direct access from Instructional Kitchen or ECS / Specialized Program Classroom

Considerations
» ADA compliant and handicapped accessible
» Sufficient floor space and electrical infrastructure to accommodate all activities



ECS / Specialized Program Classroom

Activities
- Whole group, small group, individual instruction, multi-sensory centers, and computer centers
- Ability to support a variety of educational strategies and approaches
- In addition to daily classes, the room may be simultaneously used by any of the following specialists: speech therapists, physical therapists, occupational therapists, teachers of visually or hearing impaired students, orientation/mobility specialists and audiologists

Access
- Visual access to adjacent and support spaces
- Integrated with the Learning Neighborhoods
- Direct access to Instructional Kitchen
- Proximity to Specialized Toilets

Considerations
- Consider frosting glass or diffused glass at exterior windows facing public areas that will permit maximum daylight while obscuring vision into classrooms
- Dimensional proportion of spaces should support effective viewing and listening from all areas of the room
- Classroom should look as much like a General Classroom as possible
- All aspects of accessibility should be considered



Special Education Services Classroom

Activities
» Whole group, small group, and individual instruction
» Ability to support a variety of educational strategies and approaches

Access
» Visual access to adjacent and support spaces
» Integrated with the Learning Neighborhood

Considerations
» Instructional spaces should have natural light with a view to the exterior/outdoor area
» Dimensional proportion of spaces should support effective viewing and listening from all areas of the room
» One large classroom to have folding partition to split space into two
» All aspects of accessibility should be considered
» Attention to acoustical details (excess noise, etc.). Locate away from mechanical rooms, shops, music/band rooms, and loading areas



Small Special Education Services Classroom

Activities
» Small group and individual instruction
» Ability to support a variety of educational strategies and approaches

Access
» Visual access to adjacent and support spaces
» Integrated with the Learning Neighborhood

Considerations
» Instructional spaces should have natural light with a view to the exterior/outdoor area
» Dimensional proportion of spaces should support effective viewing and listening from all areas of the room
» All aspects of accessibility should be considered
» Attention to acoustical details (excess noise, etc.). Locate away from mechanical rooms, shops, music/band rooms, and loading areas



Outdoor Patio

Activities
- Tables for small group activities like puzzles and games or crafts
- Seating with back and arm rests for support
- Space to move around or practice individual gross motor skills like hula hoops or jumping
- Quiet spaces for self regulation and calming not in full view of rest of school

Access
- Direct and easy access from ECS / Specialized Program Classroom or the end of the hall if nearby to a concrete sidewalk that provides a walking loop through campus and to various outdoor destinations
- Fenced area

Considerations
- Provide permanent shade large enough to cover 50% of the area unless building provides adequate shade
- Dedicated space to support small and whole group instruction
- Include space for a communication board, see Master Charts

6

Library





Barton Pond Elementary, Moseley Architects

Library

The Library should be the heart of the elementary educational program, providing not only information but a curriculum for developing skills needed to locate and retrieve information. Its primary purpose is to serve student users; however, it must also provide support for the teaching staff. Its program and design must reflect and accommodate a diverse population of varied backgrounds, ages, abilities, and interests.

Information literacy skills are best acquired through authentic, inquiry-based instructional practices. Planning for and teaching information literacy skills should be a collaborative effort between the school Library coordinator and the classroom teacher.

Instruction should be designed to meet the needs and interest generated from classroom activities and assignments. When the Library coordinator and teacher share this responsibility, comprehension and literacy skills instruction will occur at the most appropriate time and will maximize retention by students.

Our Goals

Create an **adaptable** space with a focus on **collaboration**

Provide guidance in the location, selection, and use of academic / instructional materials

Help students establish a **lifelong enthusiasm for reading**

Grow students' skills to create **successful and independent library users**

We Believe in

- Ever-adapting technology integrated into the student learning experience
- The value of physical books and publications
- A carefully chosen collection of books and materials
- Providing guidance in the location, selection, and use of these materials
- An atmosphere which is conducive to reading and browsing
- Providing staff with materials and services which support the classroom learning experience
- Creating a desirable learning environment that attracts students

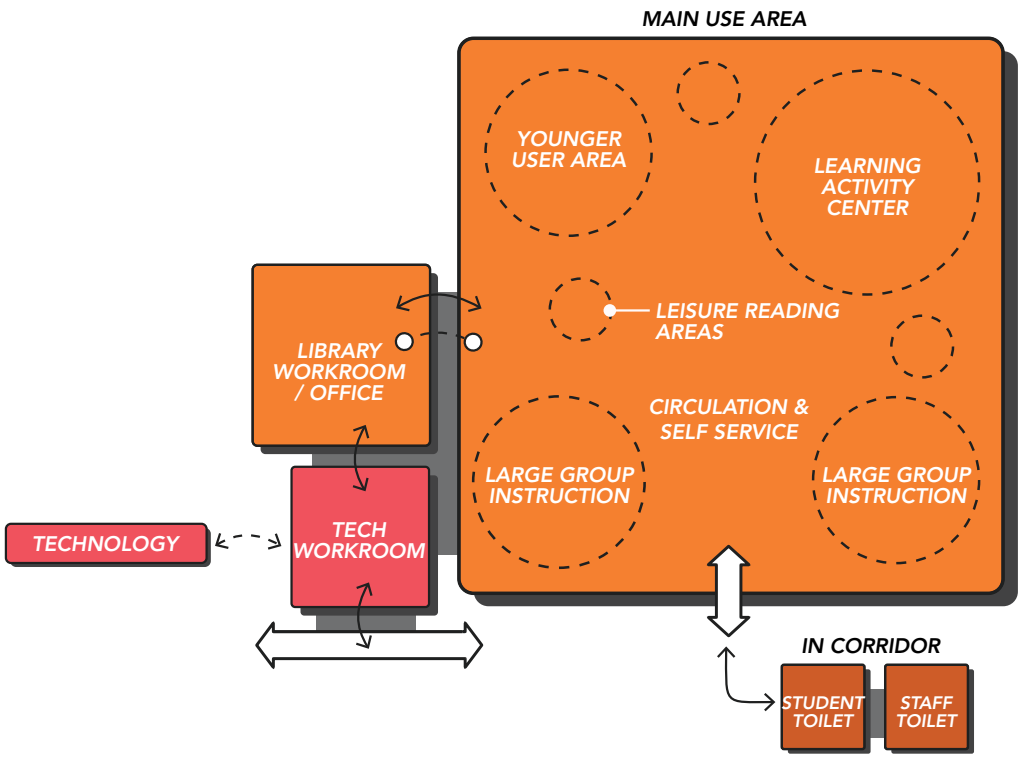


What this looks like

- Exploring books
- Reading circles
- Lecture
- Independent and group research
- Independent, small group, and entire class projects
- Interaction with all forms of media
- Opportunities for speaking, writing, reading, viewing, and listening
- Hands-on experiences with various forms of technology, including video and audio
- Optimized daylighting and views of nature in seating areas



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Centrally located and easily accessible to all students, however, it should not be a thoroughfare connecting other spaces within the school

2 The Library location within the school should be an anchor to the Learning Neighborhoods in order to increase the frequent usability of the spaces for various learning activities and co-teaching opportunities

3 Consideration should be given to after-hours community use when determining the Library's location within the building and how the rest of the facility can remain secured

4 Many students go to the Library either individually or in small groups throughout the day, which makes it important to locate it near K-2 students especially



Main Use Area

Activities
» Looking through bookshelves for books
» Informal reading
» Large Group Instruction utilizing a teaching wall and/or digital screen
» Story time reading with younger students
» Project displays

Access
» This Main Use Area is the heart of the Library and all supporting spaces should have direct access
» Daylighting and views of nature are important but physical connection with the outdoors is not preferable due to supervision coverage difficulties

Considerations
» Ceiling height and configuration can be utilized to identify different spaces and to create interest. The impact on acoustics and the effect on the lighting systems should be taken into consideration
» The configuration should facilitate visual control from all areas within the Library
» The book collection will be stored/displayed on fixed bookcases around the perimeter of the Main Use Area and on mobile units in the interior of the space with the emphasis on maximizing the utilization of the perimeter. Perimeter shelving is not to exceed 72” in height so that smaller students can access all books. The top shelf is usually used for display, so it cannot be used to calculate book count. Picture book shelving should be located in the younger user area
» Mobile bookcases are used to flexibly define spaces within the Main Use Area
» Book display and dynamic shelving are critical elements in encouraging students’ independent reading and should be included
» The walls of the Main Use Area should be free from obstructions (i.e. windows, air returns, conduit, etc.) that interfere with shelving the collection. Ceiling height should not be compromised by low HVAC equipment or ductwork.
» Additional high windows above shelving for natural light are desirable



Circulation and Self Service

Activities

» Individuals will use circulation for borrowing and returning materials and equipment including reserve materials. Staff will supervise circulation and use the space for maintaining records and for sorting returned materials
» Ample space for 12 students to check out or return materials and two people to handle circulation
» Self-service stations will be utilized by individuals and small groups to access the collection. Provide 2 student self-service stations (one must be accessible)

Access

» Near entrance/exit and Library Workroom / Office. Orient so that the Library specialist working circulation will maintain visual control of Main Use Area

Considerations

» Locate circulation desk to have an unobstructed view (minimize columns as much as possible in this area)
» See Room Data Sheets for circulation desk fixture



Large Group Instruction

Activities
» Whole group and small group instruction
» Collaboration and individual work
» Writing, reading, and assignments
» Research

Access
» Locate so Library coordinator has visual control of the Library from teaching station

Considerations
» Provide teaching wall for idea generation and collaboration, as well as digital display for learning videos or digital instruction, see Master Charts



Younger User Area

Activities
» Group instruction and reading to younger students
» Classes and smaller groups will use this space for opportunities for speaking, reading, and listening

Access
» Close to the picture book area. It should be remote from traffic patterns

Considerations
» The Library coordinator should have visual control of the Younger User Area. It should feel comfortable and friendly



Leisure Reading

Activities
» Independent reading

Access
» Position to allow for direct visual control from circulation and staff areas

Considerations
» Several clusters spread out through the Main Use Area
» These could also be niches with cushions in perimeter book stacks (shelving) or window seats amongst the stacks or small open floorspace for cushions



Learning Activity Center

Activities
» Whole group and small group instruction
» Collaboration and individual work
» Hands-on project creation, drawing, writing, reading, and assignments

Access
» Locate so Library coordinator has visual control of the Library from teaching station

Considerations
» Consider a whiteboard teaching wall for idea generation and collaboration, as well as digital display for learning videos or digital instruction, see Master Charts
» Can be an alcove or zone. If enclosed, must have glass for full visibility by Library Specialist

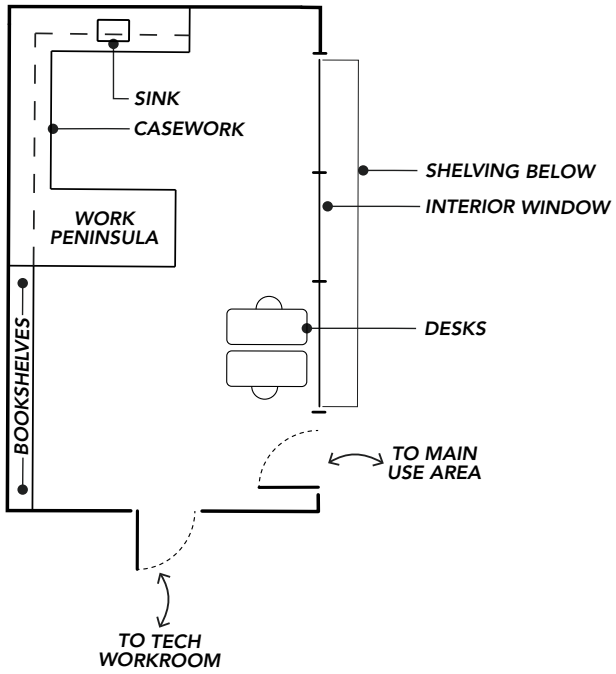


Fig. 3 - Library Workroom / Office

Library Workroom / Office

Activities

» The Library coordinator and other instructional staff will use this space for receiving, processing, distribution, selecting, ordering, and repairing materials. It will also be used for correspondence, small meetings, and record keeping

Access

» Locate near Main Use Area entrance
» Direct access to Main Use Area, Tech Workroom, and toilet

Considerations

» The work peninsula and staff desks should have visibility to the Main Use Area for supervision of students
» See Master Charts for casework and shelving requirements

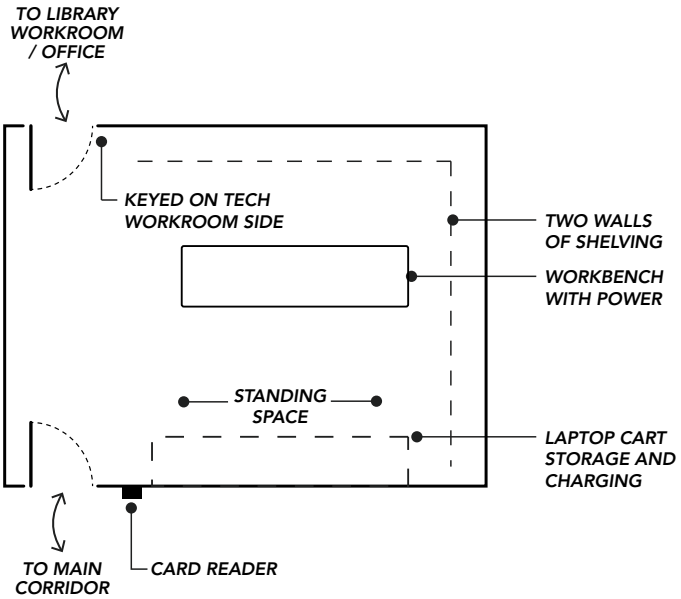


Fig. 4 - Tech Workroom

Tech Workroom

Activities

» Staging and repair of equipment
» Storage of tech equipment

Access

» Near Main Use Area entrance
» Direct access into main corridor
» Direct access into the Library Workroom / Office, see Master Charts for door requirements

Considerations

» The space should accommodate two walls of shelving for storage and staging equipment
» One wall shall be used for laptop storage carts

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8

Physical Education





Physical Education

WCPSS strives to ensure that their students are healthy and supports the belief that healthy children learn better. The district provides a Healthy Living Education curriculum that supports and reinforces the goals and objectives of its two major components – health and physical education.

The North Carolina General Statute and Laws defines the course of study of North Carolina schools including physical education and personal health and safety.

Physical Education

Our Goals

Apply/Evaluate competent motor skills and movement patterns needed to perform a variety of physical activities

Understand concepts, principles, strategies, and tactics that apply to the **learning and performance of movement**

Understand the importance of **achieving and maintaining a healthy level** of physical fitness

Use responsible behavioral strategies that **enhance respect for self and others** and value activity

We Believe in

- Lifetime participation in proper nutrition, physical activity, and sports
- Increased need for on-going physical activity opportunities due to national childhood obesity epidemic
- Lifetime participation in proper nutrition, physical activity, and sports
- Increased emphasis on dance, aerobics and non-traditional sports as exercise
- Increased use of modern technology and teaching aids for physical education (e.g. heart rate monitors, pedometers, computer programming for personal health analysis)
- Providing modified activities for students with disabilities or special needs to ensure inclusion and participation

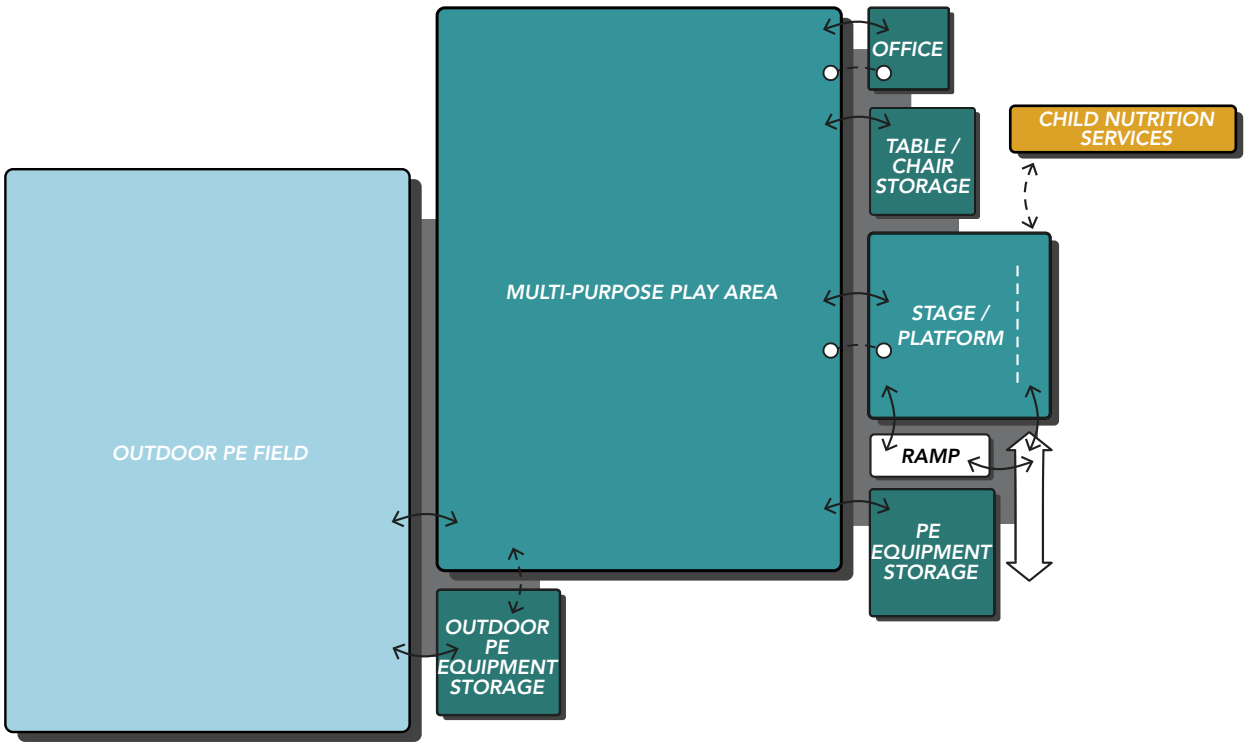


What this looks like

- Activities aimed at developing fundamental movement skills such as running, jumping, throwing, catching, and kicking
- Structured games and unstructured playtime to encourage social interaction, cooperation, and enjoyment of physical activity
- Basic concepts of nutrition, hygiene, and the benefits of physical activity for overall health and well-being
- Teaching students about safety measures during physical activities and how to prevent common injuries
- Introducing basic dance movements and rhythms to enhance coordination and expressiveness
- Periodic assessments to track students' physical fitness progress and identify areas for improvement
- Optimized daylighting in the Multi-Purpose Play Area. Windows should be high in the space to allow for daylight while minimizing damage risk during activities



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Locate Multi-Purpose Play Area so it is easily accessible from all parts of the building

2 Buffer Multi-Purpose Play Area from quieter areas of the building such as classrooms and the Library

3 The Multi-Purpose Play Area should be directly accessible to outdoor physical education spaces

4 The Multi-Purpose Play Area can be adjacent to the Child Nutrition Dining Commons

5 Outdoor PE Equipment Storage should have direct access to Outdoor Physical Education and Play

6 Provide a separate after-hours entrance to the Multi-Purpose Play Area with proximity to site parking, to facilitate isolated, after-hours use

7 Students should have to pass group toilets on the way to the Multi-Purpose Play Area

8 A ramp to the Stage / Platform can be located near a main corridor to allow a means for students to get to platform without going into the Multi-Purpose room. High visibility required

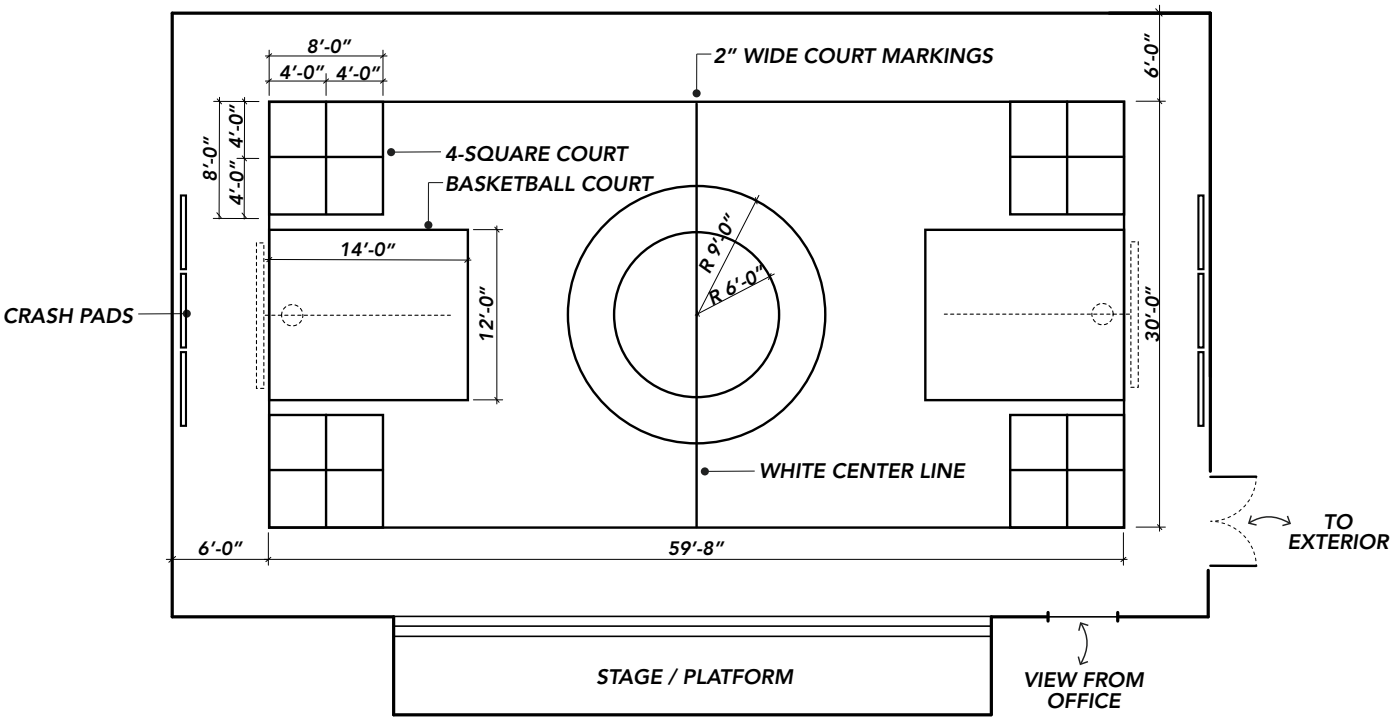


Fig.5 - Multi-Purpose Play Area

Multi-Purpose Play Area

Activities
» Physical education learning
» Assemblies

Access
» Accessible from main circulation
» Direct access to exterior and Multi-Purpose Field
» Direct access to Table / Chair Storage, PE Equipment Storage, and Office
» Stairs directly connecting the Stage / Platform to the Multi-Purpose Play Area
» Close proximity or direct access to a secure, after-hours entry

Considerations
» Walls shall be free of all projections with no corners
» Provide acoustical treatment to control sound transmission and internal noise control
» The primary teaching wall should be near the entrance
» Must have ability to darken Multi-Purpose Play Area during multi-visual presentation
» Drinking fountains nearby, see Master Charts

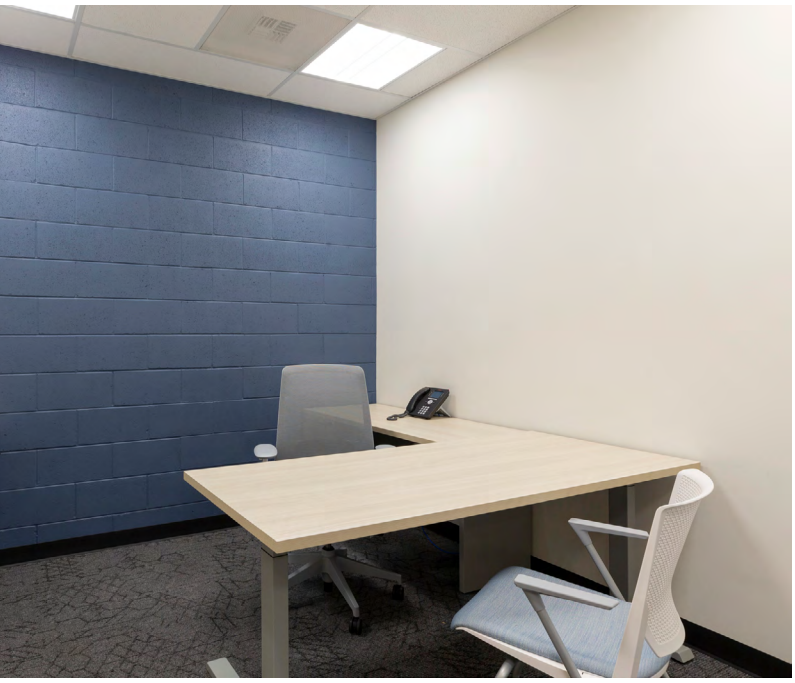


Stage / Platform

Activities
- School productions
- Dance classes
- Speakers

Access
- Stairs directly connecting the Stage / Platform to the Multi-Purpose Play Area
- Ramp directly connecting the Stage / Platform to PE Equipment Storage
- Access to corridor

Considerations
- The Stage / Platform should be accessible for all participants
- Proscenium opening should be 40'w x 20' h (minimum)
- Steps from the Platform to Multi-Purpose Play Area should run the full length of the platform performance area, allowing students to use the steps for risers during a performance
- Risers shall be three 6" steps for a minimum rise of 18"
- Provide contrasting color on tread nosing
- Ensure that the curtains do not interfere with access to the steps
- Ideally, the rear of the platform should connect with Table / Chair Storage on one side and PE Equipment Storage on the other side



Office

Activities
» Workstation for individual work
» Meetings with students, parents, and staff
» Working with confidential material or files

Access
» Direct access to Multi-Purpose Play Area

Considerations
» Supervision of Multi-Purpose Play Area

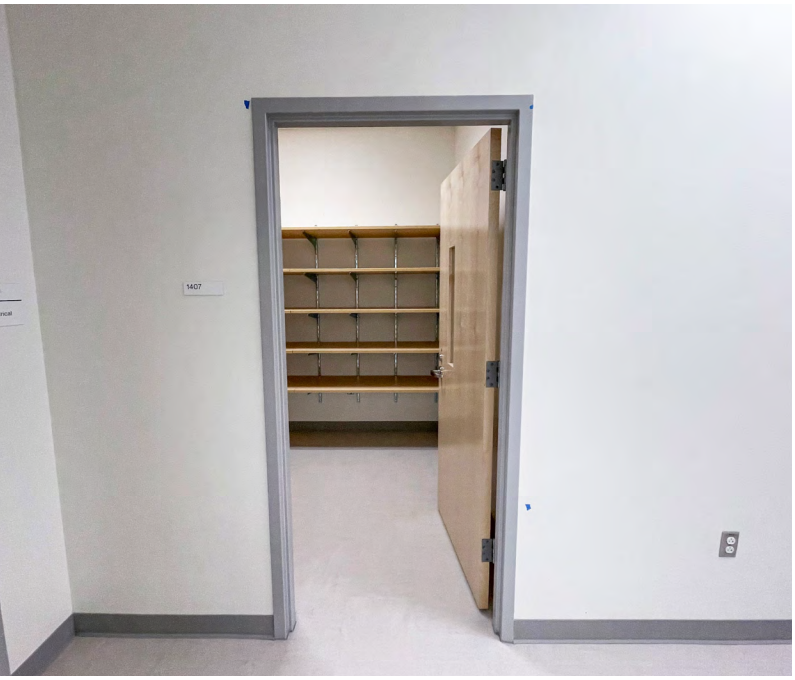
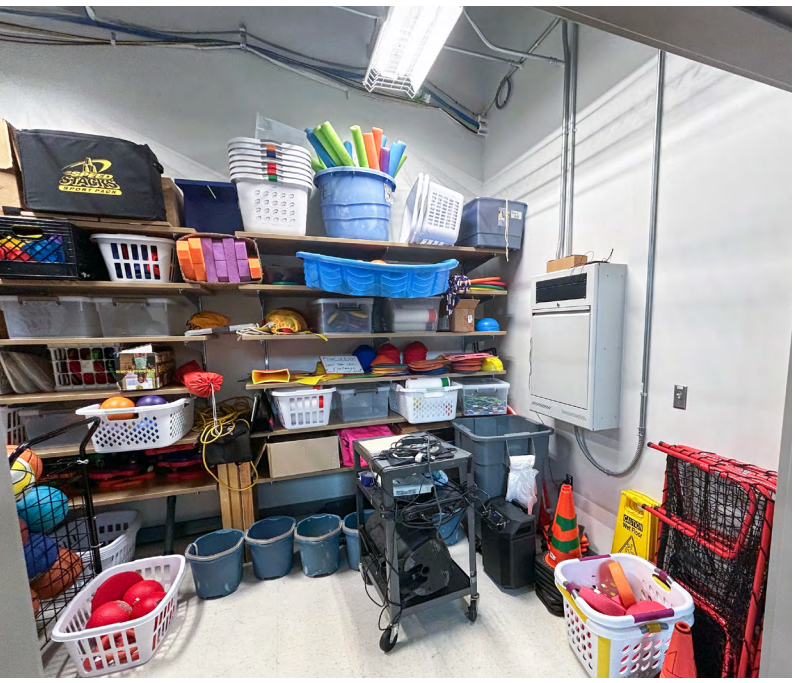


Table / Chair Storage

Activities
» Storage of stackable chairs on dollies

Access
» Direct access to Multi-Purpose Play Area
» Near Stage Platform

Considerations
» Chair racks configuration
» Wide opening to get chairs through, see Master Charts

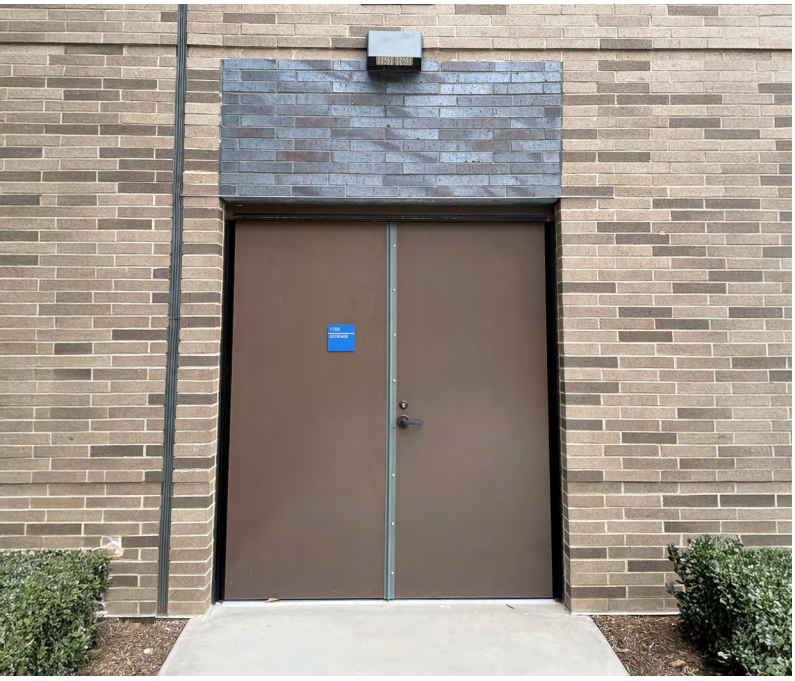


PE Equipment Storage

Activities
» Storage of PE Equipment

Access
» Ramp directly connecting the Stage / Platform to PE Equipment Storage
» Direct access to Multi-Purpose Play Area and corridor

Considerations
» Provide open railing so children on ramp are visible from PE Equipment Storage
» Provide perimeter adjustable metal shelving to support campus storage needs and safe dual usage of the PE Equipment Storage as “wing space” during performances and gatherings



Outdoor PE Equipment Storage

Activities
» Storage of PE equipment used on Grassy Play

Access
» Locate near Multi-Purpose Play Area
» Direct access to the exterior and Grassy Play

Considerations
» Does not have to be a conditioned space. Furnish storage solutions accordingly
» For storage requirements, see Master Charts

9

Visual and Performing Arts





Visual and Performing Arts

WCPSS believes the arts greatly enrich the basic educational experience and prepare students for lifelong learning. Dance, music, theatre arts and visual arts are central to the standards-based curriculum. Studying the arts helps students develop skills in creativity, communication, collaboration, making connections, analysis, critique, problem-solving and self-discipline.

Elementary students explore music and visual arts. Magnet elementary schools offer additional electives in dance, instrumental music (band, strings) and theatre.

9 Visual and Performing Arts

Our Goals

Encourage creativity and **cultivate artistic talents**

Use creativity to **make decisions and solve problems**

Instill a love in lifelong learning of art

Understand the influence of the arts and their power to **create and reflect cultures**

We Believe in

- Preparing students for lifelong learning through engaging experiences with dance, music, theatre arts, and visual arts
- Enriching the basic educational experience through the arts
- Interdisciplinary integration of music and the arts into the total curriculum
- Developing creativity, communication, collaboration, making connections, analysis, critique, problem-solving and self-discipline through the arts
- Recognizing and supporting unique talents in students
- Diverse activities corresponding to grade level needs and interests
- Working as a team and collaboration with others
- Promoting cultural awareness through artistic traditions, cultures, and historical periods
- Parent engagement and support to encourage student passions



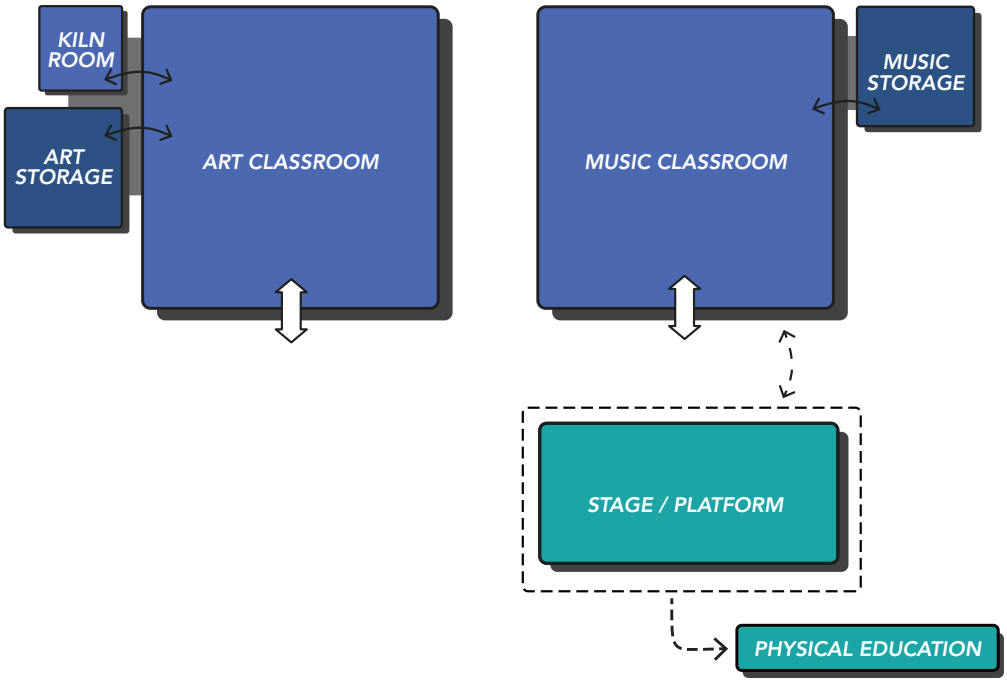
What this looks like

- Rigorous art classes focus on technical skill development, creativity, and artistic appreciation
- The making of art, the study of works of art from past and present, and the critical evaluation of art products
- Production of two-dimensional and three-dimensional art
- Increased use of technology and multi-media presentation
- Community engagement through visual art displays and showcases
- Showcasing student work and performances in schools
- Exploring music through ensemble and individual work
- Creating songs and dances which reflect the study of a variety of cultures and time periods
- Classes visiting the Arts department weekly



9 Visual and Performing Arts

Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 All Visual and Performing Arts programs are centrally located on the ground level

2 The Music Classroom should be located convenient to multi-purpose room and easily accessible by all students

3 For after hours use, provide an entrance from parking areas convenient to the multipurpose room and Stage / Platform and the ability to limit access to remainder of school beyond

4 Sound isolation must be considered for music programs

5 Exterior access is important in Visual Arts program for daylighting, ventilation, and Outdoor Curriculum Support opportunities

6 Display case in an adjacent corridor to the Art Classroom for showcasing student artwork

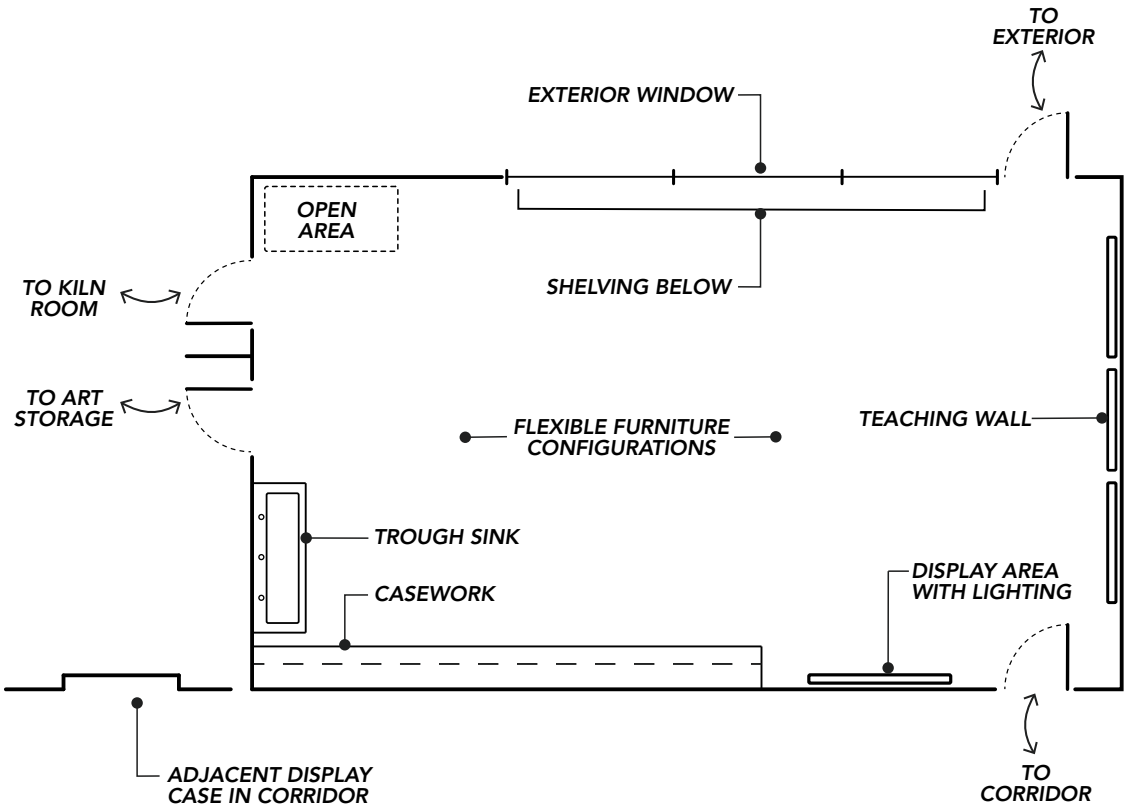


Fig.6 - Art Classroom

Art Classroom

Activities
- Individual and collaborative projects
- Group instruction
- Storage of art supplies, smocks, and student work
- Cleaning art supplies
- Painting (watercolor & tempera), sculpture, clay, printmaking and cutting, drawing, computer graphics, interactive multimedia, and art history

Access
- Direct access from corridor
- Direct access to Kiln Room, and Art Storage
- Direct access to exterior

Considerations
- Efficient use of perimeter walls for maximum storage, drying racks, and tack walls, see Master Charts
- Accessible trough sink for three students with clay traps, see Master Charts
- Open space near Kiln Room for clay projects
- Maximum daylighting and views of nature
- One or two areas for project wall displays with lighting, see Master Charts
- A display case in an adjacent corridor for showcasing student artwork with adjustable shelves, lighting, electrical outlets and tackable surfaces



Art Storage

Activities
» Storage of supplies and equipment

Access
» Direct access to Art Classroom
» Adjacent to Kiln Room

Considerations
» Efficient use of perimeter walls for storage, see Master Charts
» Well-ventilated



Kiln Room

Activities
» Clay firing
» Preparation and storage of clay, glazes, and work in need of firing in the kiln

Access
» Direct access to Art Classroom
» Adjacent to Art Storage

Considerations
» Storage of work in progress, see Master Charts for shelving requirements
» Preserve clear path to emergency electrical shutoff for kiln
» Vent kiln to exterior and provide adequate makeup air supply
» Fire rated wall construction

9 Visual and Performing Arts



Music Classroom

Activities
- Music instruction, at times taking place in a circle configuration
- Direct instruction, at times using video and/or audio
- Informal performance
- Gross motor skill activities
- Use of wide variety of instruments of varying sizes
- Singing, folk dance, creative movement, playing rhythm instruments, playing recorders, listening to music, study of music overtones, reading and writing of text and music, and performances

Access
- Accessible from main circulation
- Near or adjacent to Multi-Purpose Room

Considerations
- Sound isolate to STC 60 rating including doors
- Space should provide maximum open floor space and excellent site lines
- Consideration should be given to movement of large instruments in and out of storage
- Ability to control lighting and to use as a small informal performance space
- Avoid locating Music Classroom near Special Education program for noise



Music Storage

Activities
» Storage of variously sized instruments

Access
» Direct access to Music Classroom

Considerations
» Provide deep utility sink, see Master Charts
» Provide flexible, adjustable shelving and floor space for storing larger instruments, see Master Charts

10

Child Nutrition Services





Child Nutrition Services

Healthy eating habits are directly connected to academic achievement. Child Nutrition Services is key to design for the building's efficiency and organization.

The Dining Commons should be a large, highly flexible space to accommodate student dining periods in addition to other large group gatherings. This space is highly visible and should promote positive interactions with the school community and visitors. The food service component of the department will optimize flow and provide healthy varieties of nutrition to students, in addition to supporting staff members.

As Child Nutrition Services evolves in North Carolina, the space must be adaptable and able to sustain the future of student and staff health.

Child Nutrition Services

Our Goals

Provide meals for students and staff in a **warm, cheerful, inviting and social place**

Offer a wide variety of nutritious foods so students and staff have the opportunity to make wise food choices for healthful living

Increase efficiencies in operation and **daily management** of nutrition services

We Believe in

- Improvement of student health and enhanced ability to learn through better nutrition
- Student agency in meal selections and promoting healthy choices
- Improvement of sustainable practices and waste reduction

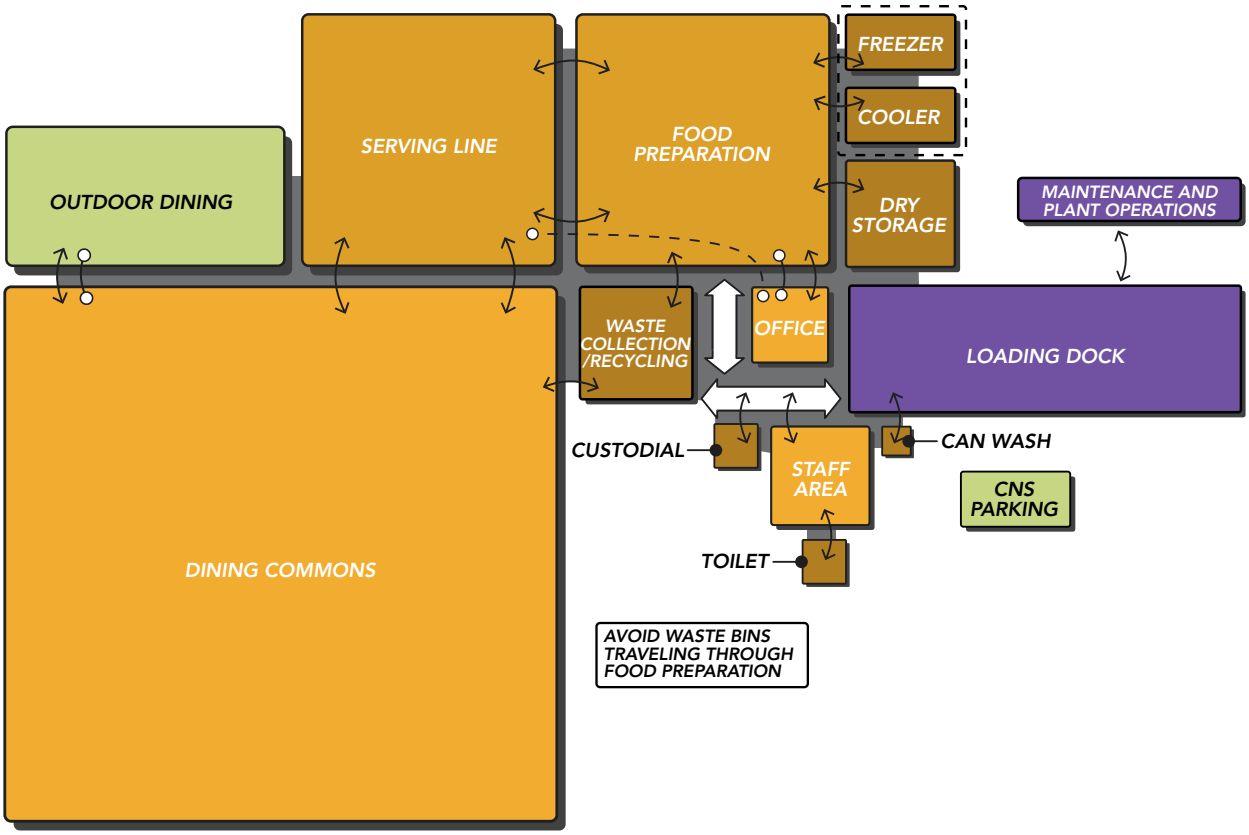


What this looks like

- Breakfast and lunch are offered on site
- Food is self-serve to accommodate individual food preferences and to reduce waste
- Meals are prepared on site
- Post-consumer recycling stations and compost waste management programs are being developed in alignment with district values
- Café-like ambiance with consideration toward aesthetics and appealing dining experiences
- Opportunities for student outdoor dining
- Managing the procurement of food and supplies needed for meal preparation. This includes ordering food, monitoring inventory levels, and ensuring cost-effective purchasing practices
- Compliance with federal, state, and local regulations related to school nutrition programs



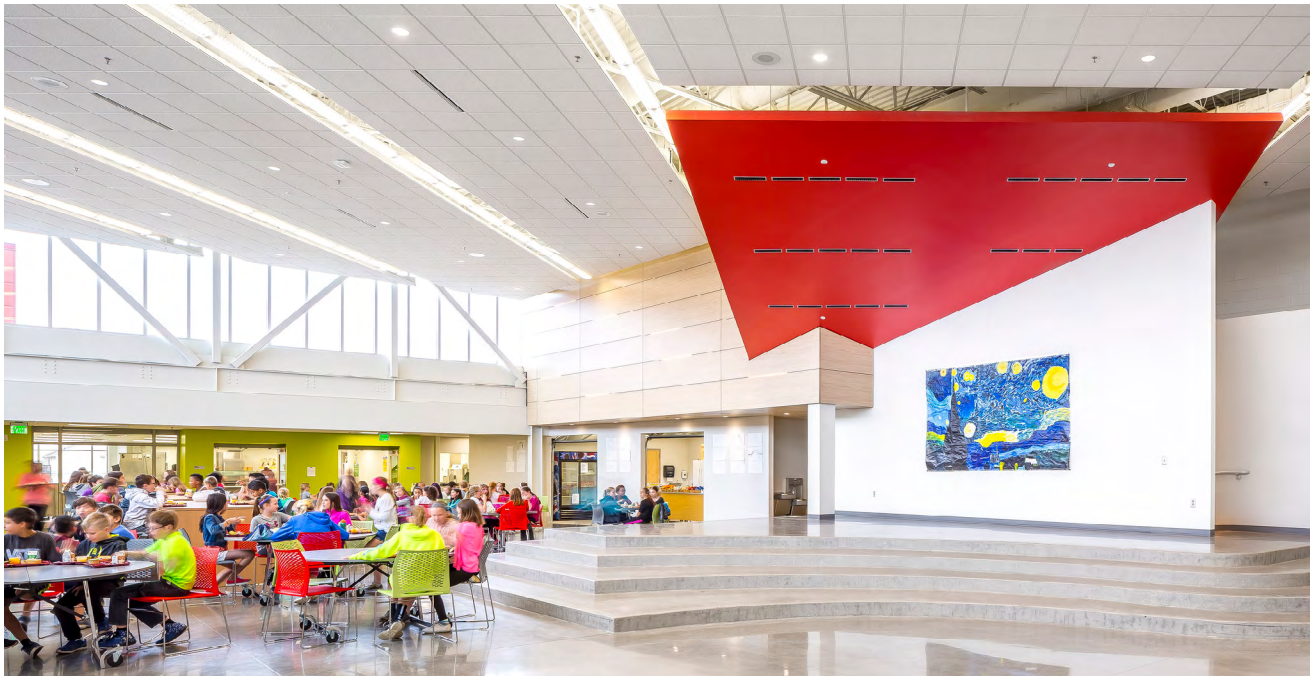
Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1. Biophilic, inviting finish materials and lighting in dining and serving areas
2. All Child Nutrition Services located together on one level with connection to Outdoor Dining
3. Schematic design drawings to be reviewed by North Carolina Department of Health
4. Limit obstructions in dining spaces for optimal functional flexibility
5. Parking for food service staff preferred near the Service Area and Loading Dock entry to Food Preparation areas with adequate site lighting
6. Kitchen equipment and layout to be approved by Child Nutrition Services at each design phase
7. Avoid formal, institutional furniture arrangements
8. Consider management and staff access to spaces outside of typical school operating hours
9. Maintain efficient and logical circulation paths around furnishings and equipment
10. Service corridor from Waste Collection / Recycling to Loading Dock to empty trash/ recycling



Dining Commons

Activities
- » Student dining, see Space Standards
- » Meetings, banquets, and other school functions

Access
- » Direct access from Serving Line
- » Waste Collection / Recycling convenient to students leaving the Dining Commons
- » Visual access to parent/bus queuing areas is desirable
- » Locate near bus and/or car queuing areas so the Dining Commons can accommodate students waiting for transportation during inclement weather
- » Locate centrally with close proximity to Administration and away from noise sensitive program areas
- » Locate group toilets nearby for daytime as well as after school hours use

Considerations
- » Variety of seating options; allow for flexibility for different size groups and configurations
- » Acoustic consideration in planning room volume and materials; provide sound dampening and isolation from adjacent spaces
- » Color and lighting to contribute to an inviting atmosphere
- » Use of graphics or murals on walls/ceilings is desirable
- » Select a coordinated color scheme for interior finishes and serving equipment
- » Coordinate power and data and blocking as required to accommodate two (2) owner-provided monitors with mounting brackets
- » Circulation and queuing in relation to serving area and point of sale, condiment stations
- » Access to natural light is required
- » Electric water cooler near the entrance, see Master Charts



Outdoor Dining

Activities
- Student dining. See Space Standards for seating capacity
- Club meeting space
- Before and aftercare use

Access
- Direct and visual access to Dining Commons
- Near Serving Line and Waste Collection / Recycling
- If secured, gates must meet building code for emergency egress
- Avoid locating adjacent to vehicular use areas

Considerations
- Provide concrete plaza area with building overhangs, shade canopies, or natural shade to allow students to be able to take their lunch outdoors
- Outdoor Dining areas protected by midday shade created by the building
- The area should be furnished with surface-mounted outdoor tables
- Design outdoor spaces accounting for teacher supervision and minimizing distractions to classroom wings
- Tables to accommodate ADA wheelchair use
- Visual separation from play areas to avoid mixing classes using the two areas
- Students should not have to travel through Outdoor Dining to access play areas



Serving Line

Activities
- Food service staff prepare, package, and serve breakfast and lunch
- Students self-select hot and cold food items

Access
- Direct access from Food Preparation and Dining Commons

Considerations
- Color and lighting impact on desirability of food choices
- Configure layouts to promote adequate supervision
- Efficient circulation and queuing pathways and clearance
- Provide one double-sided line, with capability for two cashiers
- Refer to Elementary School Food Prep/Serving Equipment Diagram
- Refer to Elementary School Food Preparation Equipment List in the Design Guidelines
- Sufficient electrical power and data, see Master Charts
- Hand sink near start of Serving Line, see Master Charts
- Pass-through kitchen equipment, see Design Guidelines



Food Preparation

Activities
» Food preparation for student, faculty and staff meals

Access
» Locate adjacent to Serving Line and accessible to storage areas
» Visual and physical access from Office
» Direct connection to Cooler / Freezer and Dry Storage
» Connection to Loading Dock; minimum 5'-6" wide corridor
» Connection to Staff Area
» Security system to accommodate zoning separate from remainder of school building

Considerations
» Clear circulation: 4'-0" minimum between centers; 3'-0" minimum between work tables; 4'-0" minimum around equipment under hood; mitigate permanent obstructions (i.e. columns)
» Food service equipment varies depending on student population and numbers served; kitchen equipment and layout to be approved by WCPSS Child Nutrition Services at each design phase
» Access to natural light is desirable
» Refer to Elementary School Food Preparation/Serving Equipment Diagram and Elementary School Food Preparation Equipment Schedule in the Design Guidelines
» Locate hand wash sinks on each end of Food Preparation
» Sufficient amount of floor drains, see Master Charts
» Sufficient electrical power and data, see Master Charts
» See Design Guidelines and Master Charts for additional requirements

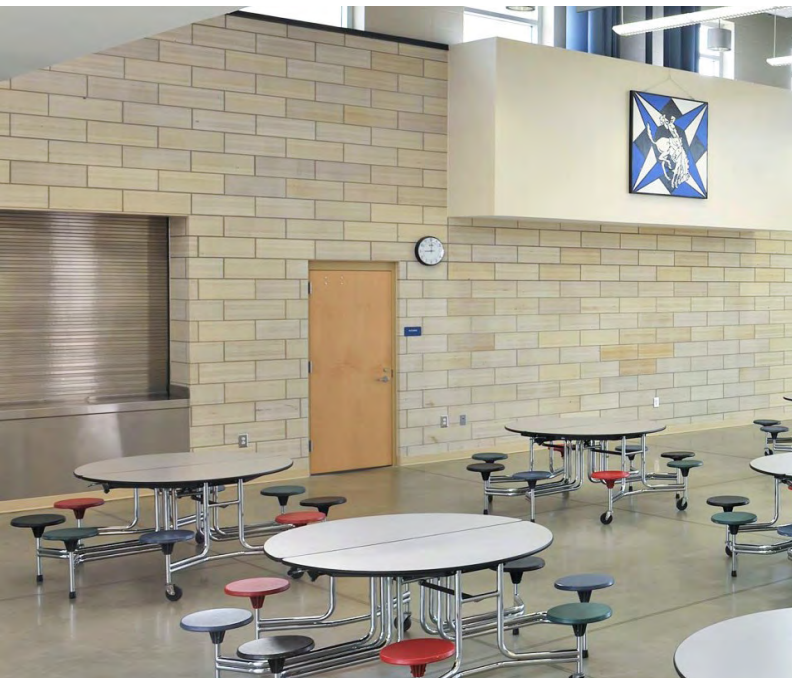


Cooler / Freezer

Activities
» Storing cold food items

Access
» Walk-in freezer and cooler to have direct access from Food Preparation
» Near/direct access to Loading Dock for food deliveries

Considerations
» Provide NSF-approved shelving and dunnage racks, refer to Master Charts for minimum quantity
» Shelving and dunnage rack units to pass through cooler/freezer doors
» Coordinate floor slab recess with cooler/freezer manufacturer and provide minimum 6” saddle threshold on interior and exterior of cooler and freezer units full width of doorway
» Any cooler and/or freezer located out of the building envelope (renovations) must have masonry cladding and have direct access from Food Preparation area
» Provide swinging curtain doors in lieu of strip curtains
» See Design Guidelines for additional requirements

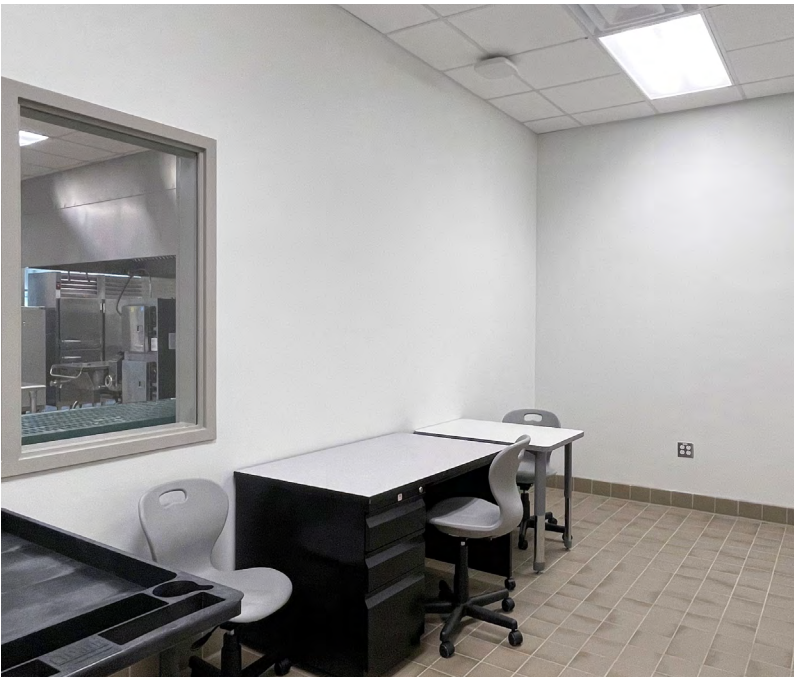


Waste Collection / Recycling

Activities
» Collection of trash, recycling, and compost materials

Access
» Direct access from Dining Commons
» Direct access to Loading Dock but avoid travel through Food Preparation
» Near Dishwashing

Considerations
» Coordinate with school facilities representation to ensure waste management practices at the facility level are accommodated (i.e. compost bins that serve school garden initiatives)
» Collection of mixed recycling waste including bottles, jugs, tubs, jars, paper, cardboard, aluminum and steel cans and bottles. Recycling waste is not pre-sorted into specific bins. Consider signage to avoid contamination of collection
» Owner provided bins



Office

Activities
» Administrative office for cafeteria manager
» Supervision of receiving and food preparation areas

Access
» Visual access to Loading Dock door, Food Preparation, Serving Line, and storage spaces
» Direct connection to Food Preparation

Considerations
» Visual supervision from seated position; fixed interior window sill height to be approximately 36” above finish floor height
» Natural light desirable



Staff Area

Break Area / Locker Room / Washer & Dryer

Activities

» Staff changing area
» Washing and drying kitchen linens
» Break area

Access

» Near Food Preparation
» Visual supervision of entrance from Office
» Direct access to Adult Toilet within Staff Area
» Near Loading Dock through corridor

Considerations

» Washer and dryer with adjacent floor drain
» Full length lockers on 4” concrete curb, see Master Charts

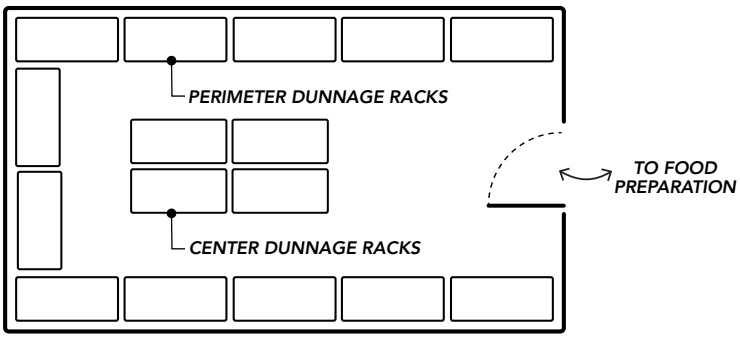


Fig.7 - Dry Storage

Dry Storage

Activities

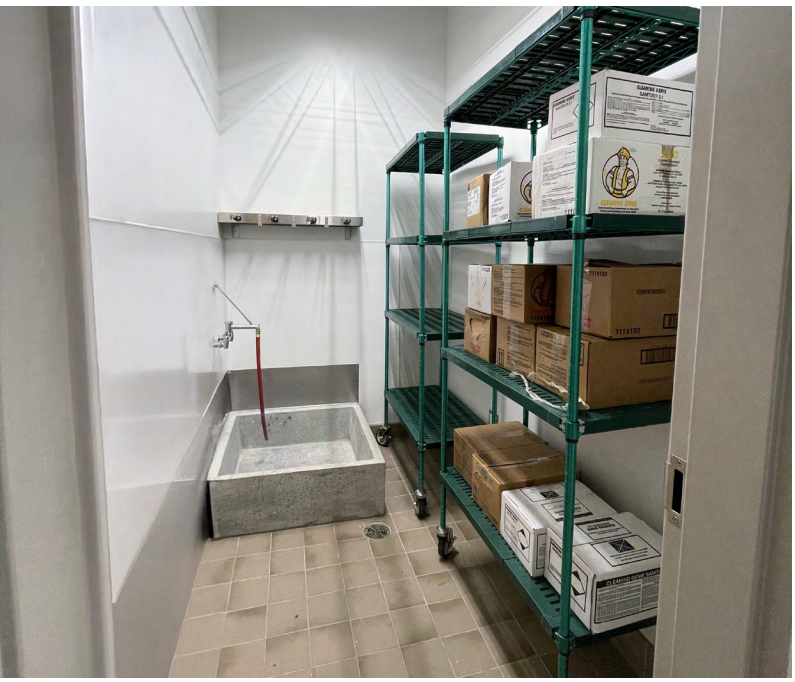
» Storage of dry goods

Access

» Near Loading Dock for food deliveries
» Direct access to Food Preparation

Considerations

» Dunnage racks on perimeter and center



Custodial

Activities
» Storage of cleaning supplies used in Child Nutrition areas
» Charging area for cleaning equipment

Access
» Accessible from Food Preparation/corridor to Loading Dock

Considerations
» Provide power and space for recharging of equipment, see Master Charts



Can Wash

Activities
» Washing bins used during the breakfast and lunch periods

Access
» Direct access from Loading Dock
» Near Child Nutrition Services door to Loading Dock

Considerations
» High curb around can wash for water mitigation
» Enclosed with masonry on three sides
» Holds two large trash cans
» Hose bib and central floor drain, see Master Charts

11

Maintenance and Plant Operations





Maintenance and Plant Operations

Maintenance and Plant Operations are both back-of-house departments and while they have different responsibilities, they both have the same objective: to support school safety by providing a clean, healthy, and organized facility for the students' and the teachers' daily lives. Custodial spaces, building receiving, and daily maintenance fall under Plant Operations, while the Maintenance department provides emergency, preventative, and large-scale maintenance services to several school sites. Both departments may share aspects of program in addition to independent areas.

Maintenance and Plant Operations both work to uphold the safety and welfare of not just the infrastructure, but the students, staff, and community as well.

11 Maintenance and Plant Operations

Our Goals

Support and maintain school infrastructure

Maintain **healthy learning environments**

Increase efficiencies in daily maintenance, shipping and receiving operations

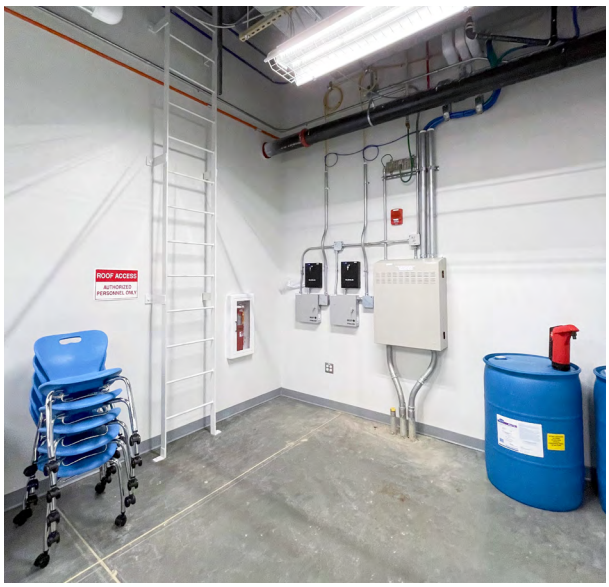
We Believe in

- Routine maintenance of facilities to mitigate indoor air quality issues and promote suitable learning environments in the long-term
- Ensuring the school building meets all relevant building codes, health regulations, and safety standards mandated by local, state, and federal authorities
- Safe and proper storage and receiving of materials and supplies
- Monitoring of thermal, electrical and emergency systems

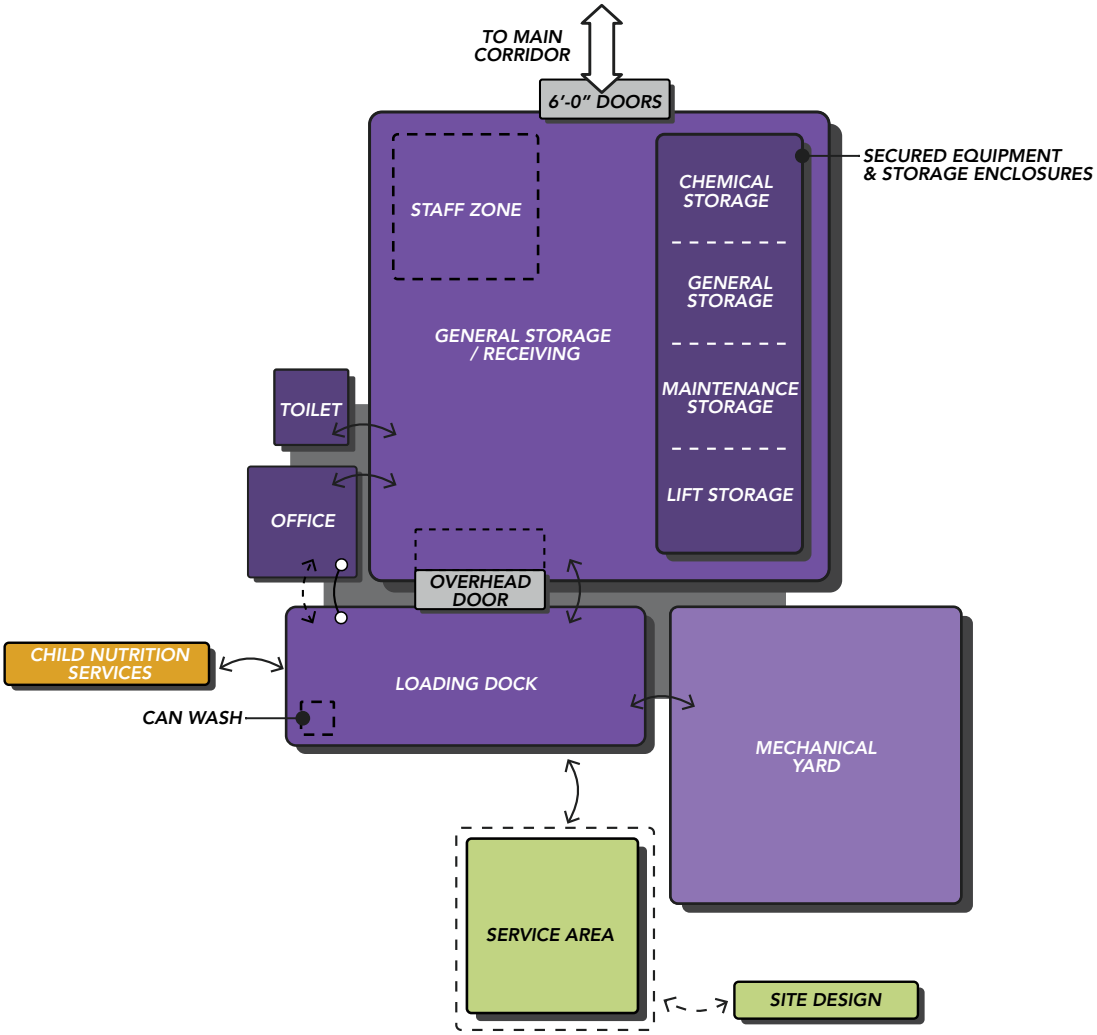


What this looks like

- Integrated technology for purchasing and processing work orders
- Maintaining facilities at regular intervals
- Separation from student activities
- Minimal disruption to student learning and school functions
- Supervision of the maintenance and custodial staff
- Supervision of deliveries
- Building operations staff trained on systems that may be more efficient for buildings to help lower maintenance cost
- Track energy cost and site energy use intensity of buildings
- Benchmark current energy consumption of buildings to identify high performing and poor performing site facilities
- Training for building operations staff on efficient operations and maintenance of all building systems



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 General Storage/Receiving is adjacent to Loading Dock and serves the entire facility

2 Provide generator to support fire alarm, security system, elevator phone, elevator lobby intercom, school servers, BDA system, emergency lighting, domestic water pumps, telecom closet, CCTV cameras, and other systems as required

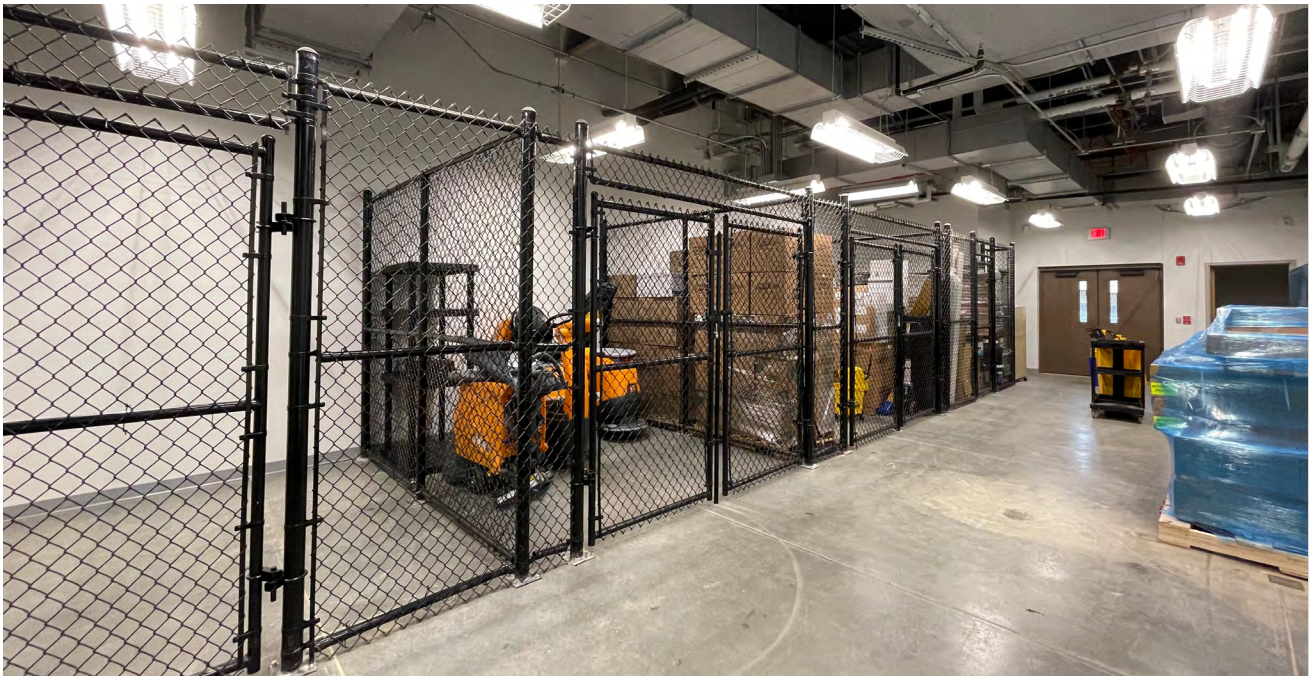
3 A single loading dock for the school facility is shared with Child Nutrition

4 A Staff Zone with custodial lockers are located within General Storage/Receiving

5 The Regional Maintenance Center is only at select schools, see Space Standards. If included in program, toilet can be shared between Plant Operations and Maintenance

6 Locate staff parking nearby

11 Maintenance and Plant Operations



General Storage / Receiving

Activities

» Support and maintenance of school facility infrastructure
» Receiving and storing supplies and equipment
» Charging equipment batteries

Access

» Plant Operations Office, Custodial Lockers, Toilet, and Indoor Equipment Storage are accessible from within General Storage/Receiving
» Exterior access to Loading Dock via overhead door with air curtain
» Interior access to primary corridor via a pair of 3'-0" doors with no mullion and hold open hardware, see Master Charts
» The Staff Zone is located within General Storage / Receiving

Considerations

» Safe storage and handling of chemicals
» Storage of large floor buffers and consider water needs and parking space
» Locate shelving on perimeter (except equipment and pallet storage wall) away from major circulation
» Preserve open floor area to sort and stack materials prior to dispersal throughout school
» Secured Equipment and Storage Enclosures: Subdivide a portion of the room with six-gauge chain link fencing into four sections. One section for chemical storage with plastic shelving. Two sections (no shelving) for general storage and palletized materials. The fourth compartment for Maintenance and Operations use to store HVAC filter media, rechargeable leaf blower, and portable lift. Consult owner prior to completion of schematic design phase to determine if modifications to quantity or function is required
» Wide openings to Loading Dock and primary corridor to accommodate palletized material
» Provide adequate ventilation of chemical storage and battery charging areas
» Dimensional proportion of space should consider circulation, storage, access and activities that take place

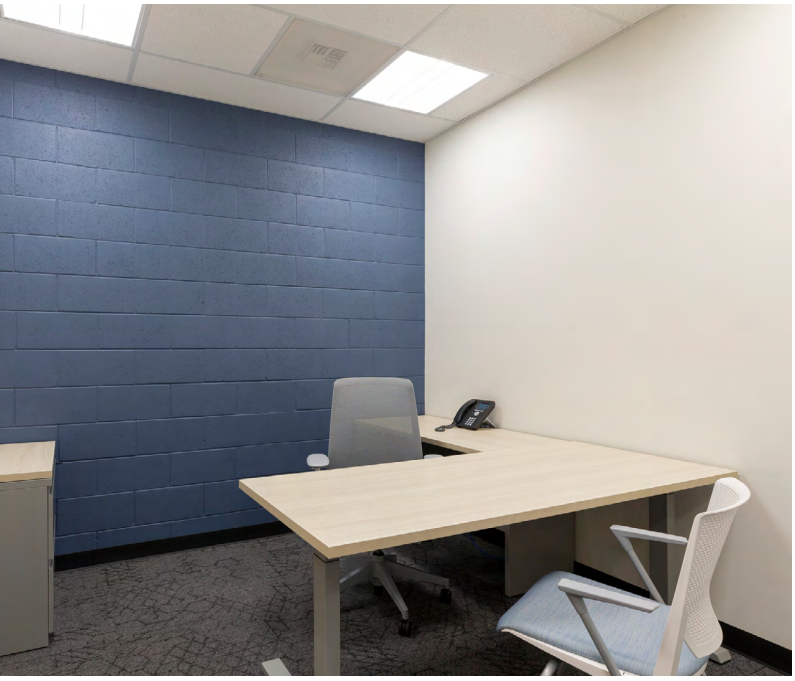


Staff Zone

Activities
» Break area for staff

Access
» Located within General Storage / Receiving
» Near toilet

Considerations
» Space for a table and chairs, tall lockers for custodial staff, and a tackboard, see Master Charts



Plant Operations Office

Activities
» Support and maintenance of school facility infrastructure
» Supervision of custodial staff
» Supervision of Loading Dock
» Computerized record keeping

Access
» Direct access to General Storage/Receiving

Considerations
» Integration of technology in purchasing and processing work orders
» Natural light desirable

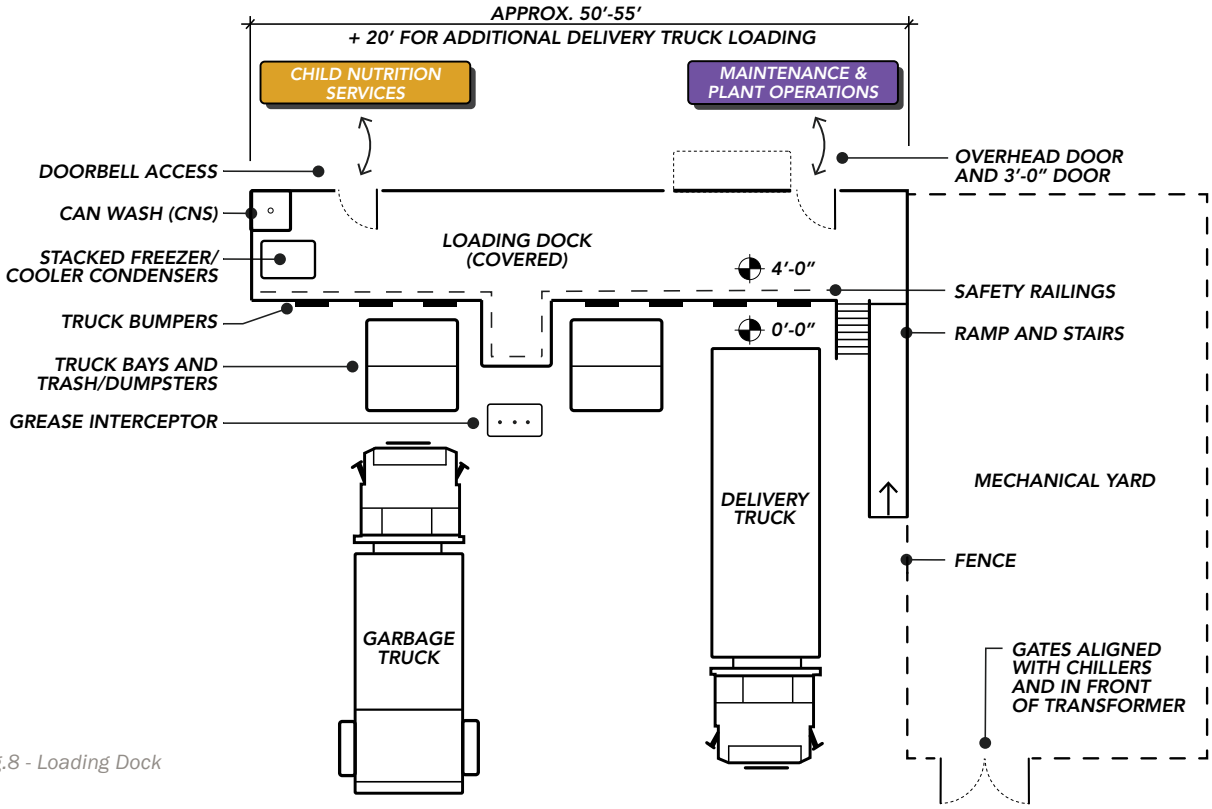


Fig.8 - Loading Dock

Loading Dock

Activities

» Deliveries of school and kitchen supplies
» Single loading dock per facility is shared between Child Nutrition Services and Plant Operations functions

Access

» Provide door with window to corridor leading to food preparation area. This door to include panic hardware (even if not required by code) and kick-stop for hold-open capabilities during deliveries
» Adjacent to Plant Operations shipping, receiving, can wash, and storage areas

Considerations

» Provide doorbell pushbutton at door from Food Preparation and storage areas to loading dock audible within Food Preparation area
» Locate fly fan outside primary access door from Food Preparation and storage areas to Loading Dock
» Limit view of dumpsters via screening or site elements and coordinate with municipality requirements
» Loading dock elevation and configuration to accommodate turning radii of delivery and disposal vehicles without the need for dock leveling equipment. Trash / Recycling trucks are front load and semi trucks are rear load
» Provide minimum 3'-0" wide x 4'-0" long peninsula extensions from loading dock to allow easier waste transfer to large dumpsters
» Locate Cooler / Freezer condenser units on Loading Dock while preserving circulation path
» Provide canopy for majority of Loading Dock
» Screening gates around dumpsters may be required per AHJ
» Single truck dock is acceptable for Elementary Schools



Mechanical Yard

Activities
» Housing and maintaining HVAC, electrical, plumbing and water systems

Access
» Direct access to Loading Dock via ramp and stairs
» Through site service road, see Site Safety and Circulation

Considerations
» Fence with gates
» Minimize noise and visual blockage

12

Technology





Technology

At Wake County Public School System, Technology plays a vital role in shaping students' understanding and application of modern tools and systems. Dedicated to innovation and digital literacy, the department provides a dynamic learning environment where students can explore various technological tools and concepts. With a team of skilled educators, technology aids with hands-on experiences and collaborative projects, empowering students to become proficient in navigating the ever-evolving tech landscape. Design must reflect adaptive spaces that promote collaborative work and allow for flexible technology use.

12 Technology

Our Goals

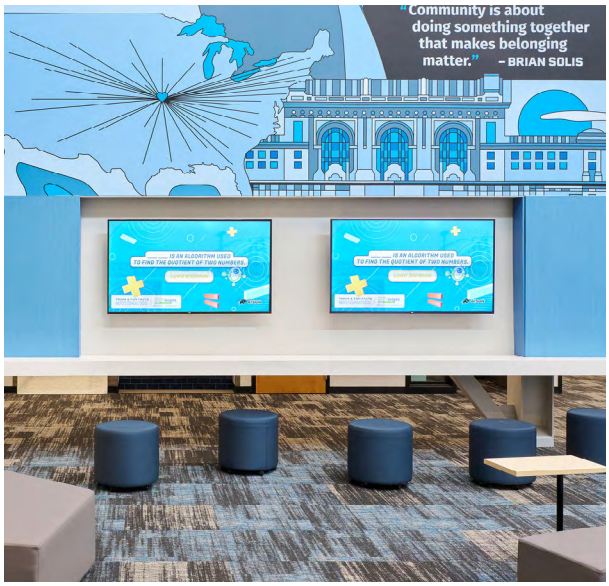
Provide technical support for faculty, administration, and students

Teach students how to **access and use information** to problem solve

Promote responsive spaces that allow the **flexible use of technology**

We Believe in

- Ensuring that all students and staff have equal access to technology and resources
- Maintaining a safe and secure digital environment for everyone
- Using technology to address challenges and create solutions in the classroom and beyond
- Seamlessly incorporating technology into the curriculum to enhance engagement and understanding
- Promoting collaboration through shared technology projects



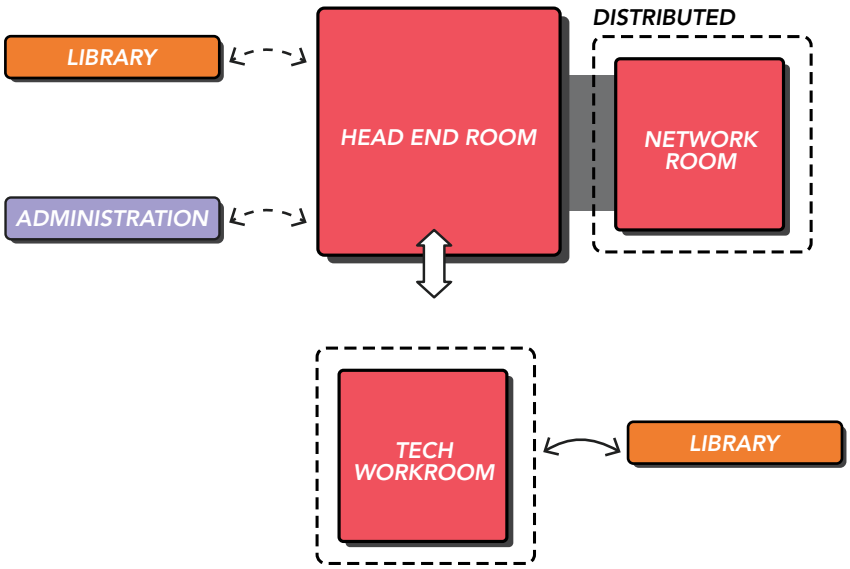
What this looks like

- Total integration of voice/data and video system
- Reduced emphasis on computer labs and greater emphasis on classroom computers
- Providing complete coverage of WiFi in the building and some outdoor areas
- Provide services such as e-mail, SIMS, NCWISE, and work order processing
- Video-conferencing, locally and nationally as well as worldwide
- Space planning for student device storage / carts in every classroom
- Additional storage for assisted devices
- Display panels dual serving as digital signage
- Increased need for remote learning with live video discussions
- Increase standardization across schools
- School-provided hot spots by request for students without WiFi at home
- Classrooms include mobile furniture and integrated technology for flexibility



12 Technology

Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Locate the Head End Room in a secure interior area near the Library and / or Administration

2 Distribute Network closets among school and coordinate with the District on locations

3 Secure access only for all Technology programs

4 In Learning Neighborhoods, plan for device storage location and charging needs. Coordinate Learning Commons digital displays efficiently when needed and dual usage of signage

5 In Special Education spaces, plan for larger, assisted device storage location and charging needs

6 Coordinate with the District on all needs of Technology program and refer to the Design Guidelines for equipment needs



Head End Room

Activities
» Central junction of all communications connections: data lines, phone lines, fiber optic lines, etc.

Access
» Location and access must be secure
» Near the Library and / or Administration
» The door should be sized to accommodate replacement of equipment located within the room

Considerations
» Uninterrupted HVAC for year-round cooling required to counterbalance generated heat
» Plan for conduit in vertical infrastructure between floors
» Consider parameters of fiber optic cabling
» Plan to install conduit for all voice/data outlets
» Additional satellite technology closets may be required; size and placement to be determined per project
» Prefer no dimension less than 12'-0"
» See Design Guidelines as the basis for wiring and termination standards
» See Design Guidelines for Electrical Safety and Security Systems in addition to Technology/Special Systems for required equipment



Network Rooms

Activities
» Housing IT and electrical equipment
» Regularly monitoring and maintaining network infrastructure

Access
» Coordinate with district on Network Room locations
» Access must be secure

Considerations
» Provide emergency lighting, signaling and telecommunications as required by code
» Provide panic hardware and close on push side of door, see Master Charts

13

Building Support





Building Support

Building Support includes unassigned spaces that are factored in the gross building program area and are associated with circulation and group or individual building toilets. These support areas are integral components of a well-functioning school infrastructure, ensuring smooth operations, accessibility, safety, and a positive environment for learning and community engagement.

Building Support

Our Goals

Create a secure environment in the event of emergencies or threats

Increase efficiencies in building connectivity

Maintain **healthy and safe environments**

Universally accessible and **code compliant**

We Believe in

- Spaces that function for the intended usage and support school infrastructure
- The power of all spaces to positively impact students
- Ensuring the school building meets all relevant building codes, health regulations, and safety standards mandated by local, state, and federal authorities
- Ensuring that every part of the school building is accessible to students, staff, and visitors, including those with mobility challenges
- Designing spaces along circulation paths that encourage informal social interactions among students and staff, fostering a sense of community within the school
- Utilizing wayfinding strategies to help students, staff, and visitors navigate their campuses efficiently and comfortably

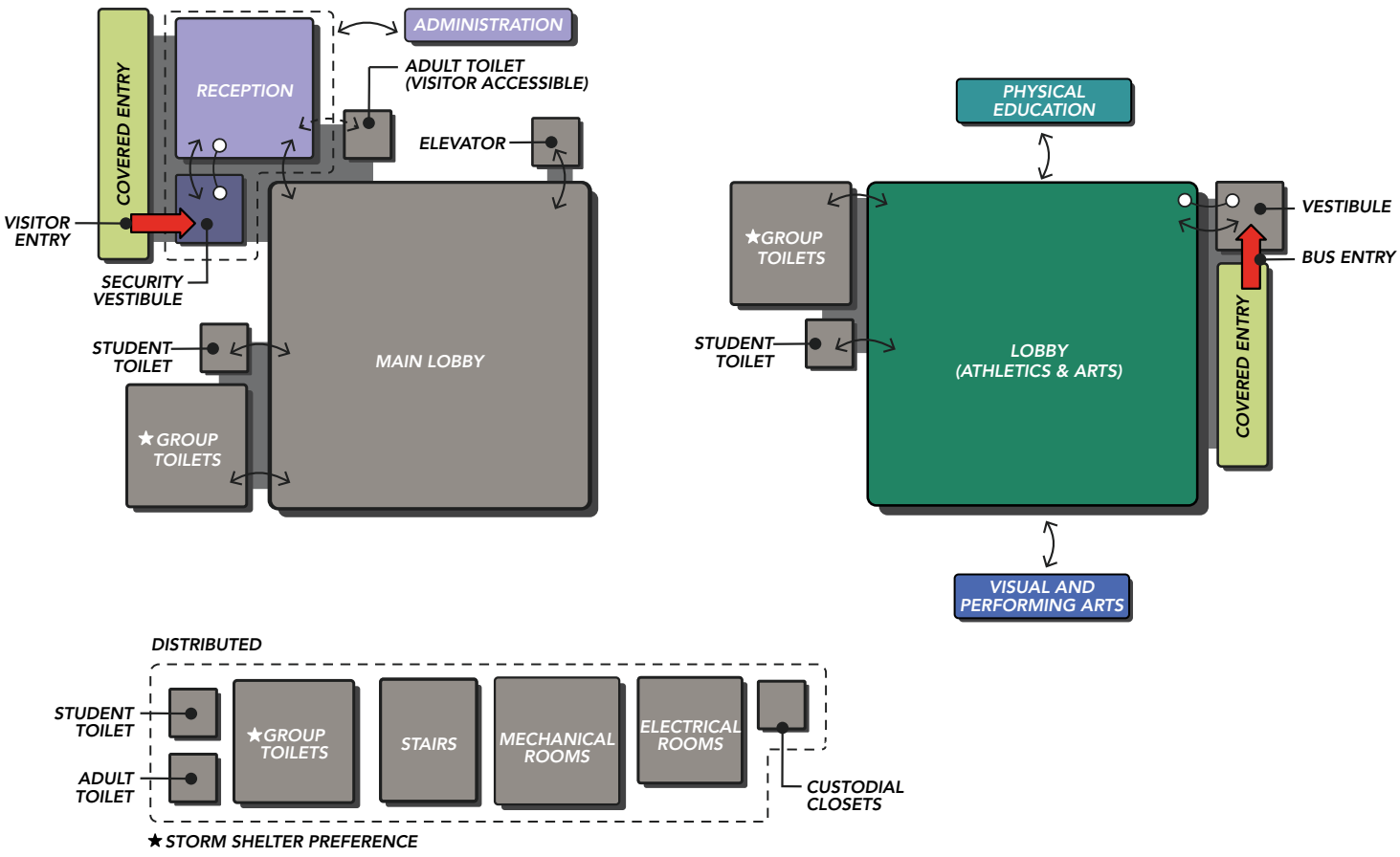


What this looks like

- Accessory spaces required for the building to function
- Regular upkeep of support program to ensure they are safe, clean, and operational
- Daily use from students, faculty, and visitors
- Essential pathways or spaces that facilitate movement and connectivity within the school building
- Social interaction and informal gatherings among students



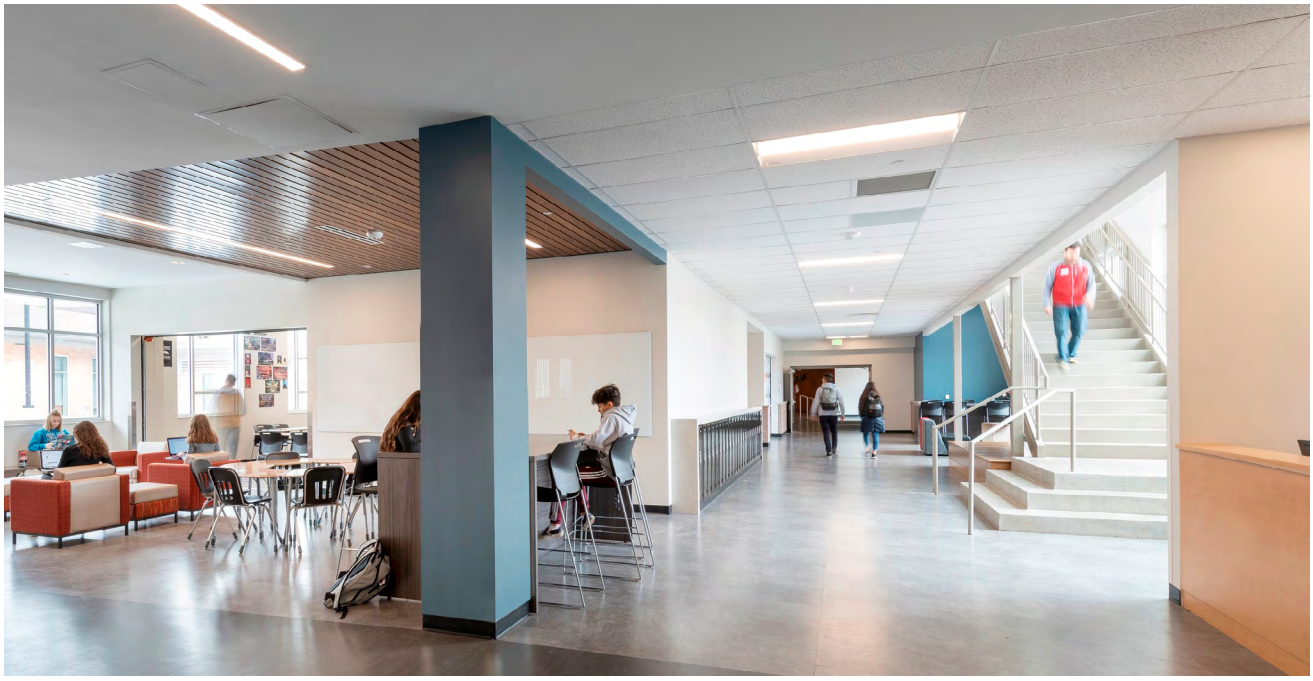
Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1. Well-designed circulation routes to minimize congestion and reduce travel times
2. Plan for building compartmentalization and security in early design
3. Spaces should be warm and welcoming, while easily supervisable
4. Efficient wayfinding through clear signage, color coding, digital displays, and physical layout
5. Plan for storm shelters and other emergencies, see Chapter 2 - Security and Safety
6. Distributed Building Support spaces based on code requirements and specific building design



Lobbies

Activities
- Welcoming space as people enter or exit the building
- Large gathering space for entry into or exiting from event spaces (such as gymnasiums or auditoriums) or during events
- Informal socialization
- Temporary learning space or practice space

Access
- Locate the Main Lobby at the primary entry of the school, with direct access to the exterior Security Vestibule. Additional lobbies located per design, see Administration
- See Physical Education for athletics lobby
- See Visual and Performing Arts for theater lobby
- Parking
- Corridors or connections to rest of school and academic wings but with the ability to zone off the academic sections of the building and limit access during after-hours events
- Group Toilets
- Event space (gymnasium, auxiliary gymnasium, auditorium)

Considerations
- Large volume space
- Display areas of student work or achievements, and team sporting achievements
- Sound attenuation
- Possible digital display(s) outside of gymnasium or auditorium for announcements to live-stream events within event space or as a reader board at main entry
- Warm and welcoming at the main entry as the living room of the school
- Used for staging of car-pool and bus riders
- See Master Charts for additional requirements



Vestibules

Activities
» Entry and exit of school

Access
» Direct access into and out of school during student arrival and dismissal times

Considerations
» Ability to remotely secure space limiting outside access into vestibule, access from vestibule into school corridor, and access into administrative offices
» See Administration section for Security Vestibule connected to the Main Lobby



Corridors

Activities
» Horizontal circulation

Access
» Direct access to all departments and support spaces
» Direct access to exits and lobbies

Considerations
» Corridors width as required by building code and approved by WCPSS
» Can be widened as collaborative space outside of classrooms or in main academic wings of the school, refer to Learning Neighborhood commons space considerations
» Display of student work (short-term or long-term) or display of informational material



Stairways

Activities
» Vertical circulation between multiple floors

Access
» Direct access off Corridors or Lobbies

Considerations
» Durable materials
» Code compliant but open, if possible, to increase supervision and strengthening connection between floors
» Fire-rated glass into stairwells when they must be enclosed, to aid with visible supervision
» Windows with views to the outside to connect with nature, where applicable, and provide daylighting
» Consider utilizing space on ground floor under open stairs as potential supervisable seating/socialization space if allowed by code



Elevator

Activities
» Vertical circulation, handicap accessible
» Freight and furniture handling
» Space to accommodate an ambulance stretcher in the event of an emergency

Access
» Locate centrally in a main corridor

Considerations
» Elevator equipment room



Group Toilets

Activities
» For students and visitors

Access
» Academic wing corridors, gymnasium, theater, and main gathering areas
» Conveniently but not prominently located
» Storm shelter preference in the event of emergency
» As driven by code

Considerations
» Quantity driven by code compliance unless noted otherwise
» For group bathrooms, arrange in similar fashion (boys' bathroom on the left, girls' bathroom on the right) consistently throughout school
» Safety is of utmost importance. Reduction of bullying, vandalism, or banned behavior is a driving design factor
» Visible supervision into hand-washing area and acoustical supervision of entire bathrooms. Sinks should be located outside the toilet room proper, in an alcove or wide area off the corridor
» Do not locate mirrors where views are created into toilet area and do not locate above sinks
» Ensure sight lines from corridor are obstructed
» Location of EWC nearby, see Master Charts



Staff Toilets

Activities
» Single user restroom for staff and visitors

Access
» See Space Standards for locations of Faculty Toilet rooms

Considerations
» ADA accessible/barrier free
» Ventilated with switch control
» Mirror and storage, see Master Charts



Student Toilets

Activities
» Single user restroom for students and visitors

Access
» Direct access from corridor

Considerations
» One single-user, handicap accessible bathroom should be located adjacent to all group toilet rooms and as designated throughout the building
» Safety is of utmost importance. Reduction of bullying, vandalism, or banned behavior is a driving design factor
» ADA accessible/barrier free
» Ventilated with switch control
» See Master Charts for additional requirements

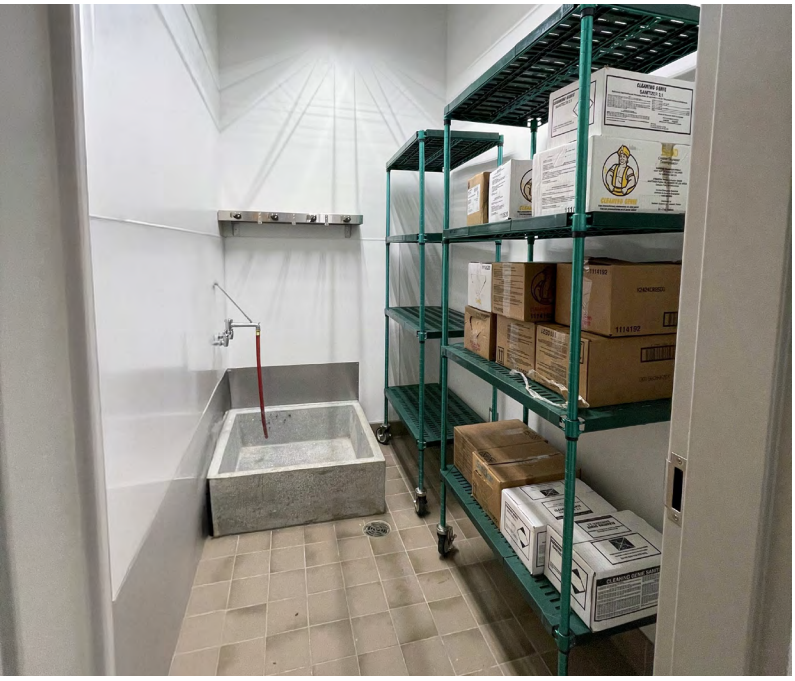


Mechanical and Electrical Rooms

Activities
» HVAC (heating, ventilation, air conditioning), plumbing, IT, fire protection, and electrical equipment

Access
» Provide exterior access at the main mechanical and electrical rooms. Doors should be sized to accommodate replacement of equipment located within the rooms
» Appropriately-sized and located louvers to exterior

Considerations
» Provide panic hardware and closer on push side of door, see Design Guidelines
» Provide emergency generator
» Provide emergency lighting and signaling
» Acoustics and vibration
» Limit roof top equipment
» Local utility and planning requirements



Custodial Closets

Activities
» Storage of cleaning and custodial supplies; storage of custodial cart

Access
» Preferred connection to large group spaces or along corridors in academic wings

Considerations
» Two closets on the ground floor and one closet on each upper floor
» Mop sink and floor drain, see Master Charts
» Space should be large enough and configured to easily store custodial cart (approx. 44” x 19”), mop bucket (approx. 20” x 20”), large trashcan, and upright vacuum, in addition to fixed shelving and mop sink. Vacuum to fit besides mop sink

13

Outdoor Physical Education & Play





Outdoor Physical Education & Play

Elementary physical education and outdoor play are vital for developing fundamental motor skills and encouraging active lifestyles. By integrating physical education with daily activities, students gain improved coordination, strength, and endurance, which directly contribute to their overall health and academic performance. These activities also foster teamwork, discipline, and self-confidence, all of which are essential for a well-rounded education and a higher quality of life.

See North Carolina Department of Public Instruction for more information on the Health Education Essential Standards for Elementary students.

Outdoor Physical Education and Play

Our Goals

Promote **physical movement, creativity, teamwork, and fun**

Create a recreation space to reset students for **improved focus** in the classroom

Create **place-making and identity** by reflecting local culture and community needs in site spaces

We Believe in

- Giving students the chance to move, stretch, and play so they return to the classroom ready to learn
- Supporting learning, because physical activity boosts brain function, attention span, and memory
- Creating safe, inclusive, and well-equipped play spaces
- Making space for fun and imagination, where students can be creative outside of the classroom
- Providing play areas that are safe to walk to, supervise, and enjoy
- Increased need for on-going physical activity opportunities
- Lifetime participation in proper nutrition, physical activity, and sports

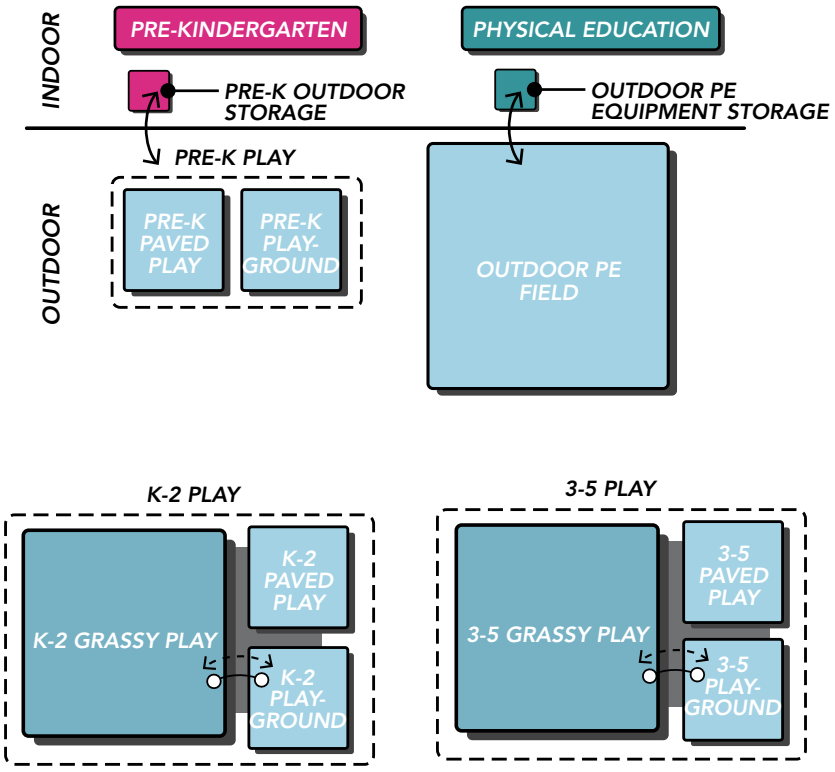


What this looks like

- A positive perception of the school setting and culture
- Positive interaction with adults and peers
- Restoring energy to support student success
- Creating safe spaces for those who feel different
- Reducing stress and mental strain
- Ability for students to gain confidence in their physical abilities with challenging play equipment
- Promote social interaction, problem solving, and cooperation skills
- Quiet spaces to promote Outdoor Curriculum Support and focus time
- The elementary physical education program guide identifies development of team sports skills



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1. Secure outdoor play spaces and play fields from adjacent neighborhood, public streets, and vehicle traffic
2. Locate Outdoor PE Field adjacent to the indoor Physical Education facilities for ease of access
3. Locate Pre-K Play with direct access from classrooms
4. Buffer outdoor play areas from quieter areas of the building such as classrooms and the Library
5. Outdoor PE Equipment Storage may be remote from the Multi-Purpose Play Area
6. Site areas for school development can be limited. Accommodate adjacencies as best as possible and coordinate with the District

14 Outdoor Physical Education and Play



Pre-K Play

Overall Requirements

- Designed to meet NC 5-Star daycare rating
- Play structure and surfacing are provided by WCPSS: Roughly 1,700 square feet with fall zones, see Space Standards
- Shade structure is provided by WCPSS: Provide shade for compliance with NCDHHS requirements
- Provide a paved trike path in the play area
- Provide water access to this play area for water features
- Small space for planting with one planter ADA accessible
- Patio space for sensory play
- Provide grassy open space for play
- See Design Guidelines for slope requirements

Access

- Direct access to the Pre-K Classrooms
- Direct access to Pre-K Outdoor Storage
- Provide fencing around the play area perimeter which must meet requirements of NCDHHS 5-star ratings
- Provide access gate wide enough to accommodate mowers
- Pedestrian gates must meet fire code for egress

Considerations

- Grading around play area should coordinate with synthetic safety surface (by WCPSS), and to ensure safety from abrupt drop offs
- Natural/grassy area for planting flowers and/or vegetables can occur inside or outside the fenced area

14 Outdoor Physical Education and Play



K-2 Play

Overall Requirements

» Outdoor K-2 Play includes a playground equipment area, paved play, and grassy play
» Playground equipment and surfacing provided by WCPSS: Roughly 2,500 square feet, see Space Standards
» Proper drainage must be provided under all equipment locations
» Provide natural grass at grassy play
» At paved play, the surfaces shall be painted with shapes, patterns and configurations for games and activities
» Ensure ADA accessibility to the play areas
» See Design Guidelines for slope requirements

Access

» Near the Learning Neighborhoods for K-2
» Locate playgrounds within view of grassy play areas
» Entire K-2 Play area should be visible for supervision
» Coordinate fencing for safety and security and to serve as a ball stop

Considerations

» Play area design should consider and identify a location for a shade structure provided by others in the future
» K-2 Play area shall be designed to facilitate imaginative play and passive play
» Grassy play areas can take on smaller, more organic shapes
» Design with natural buffer areas between outdoor play spaces
» Tree groupings can be incorporated into K-2 Play area for imaginative play
» Wide path from school building

14 Outdoor Physical Education and Play



3-5 Play

Overall Requirements

» Outdoor 3-5 Play includes a playground equipment area, paved play, and grassy play
» Playground equipment and surfacing provided by WCPSS: Roughly 2,500 square feet, see Space Standards
» Proper drainage must be provided under all equipment locations
» Provide natural grass at grassy play
» Design a Paved Walking Path for a measured distance of at least 1/10-mile with distance markings. Path length depends on the available site area but must be a whole segment of a mile
» At paved play, the surfaces shall be painted with shapes, patterns and configurations for games and activities
» Ensure ADA accessibility to the grassy play and walking path
» See Design Guidelines for slope requirements

Access

» Near the Learning Neighborhoods for 3-5
» Locate playgrounds within view of grassy play areas
» Entire 3-5 Play area should be visible for supervision
» Coordinate fencing for safety and security and to serve as a ball stop

Considerations

» Play area design should consider and identify a location for a shade structure provided by others in the future
» 3-5 Play shall be designed to facilitate gross motor skill development and active play
» Design with natural buffer areas between outdoor play spaces
» Tree groupings can be incorporated into 3-5 Play area for imaginative play
» Wide path from school building

Outdoor Physical Education and Play



Outdoor PE Field

Overall Requirements

» An outdoor field roughly the same size as the Multi-Purpose (Play) Area for outdoor activities, see Space Standards

Access

» Direct access from Physical Education
» Direct access to Outdoor PE Equipment Storage

Considerations

» Positive drainage and grading are to be considered

15

Site Design





Site Design

As one of the fastest growing areas the nation, finding property that can easily be developed is a challenge so each site has unique characteristics that must be considered.

Circulation pathways for vehicles and pedestrians are developed to promote safe and efficient movement throughout the campus, ensuring easy access to all areas while minimizing traffic congestion. Native plantings provides natural shade, noise reduction, promotes essential outdoor learning and dining spaces, and encourages students to engage with nature, explore their environment, and spend time outdoors. Additionally, well-planned site services support the district's operations, ensuring a seamless integration of facilities and resources. Together, these elements enhance both education and student well-being.

15 Site Design

Our Goals

Create **place-making and identity** by reflecting local culture and community needs in site spaces

Accommodate the school's **outdoor physical education requirements** for activities and events

Safely and efficiently manage on-site vehicular car and bus traffic, and pedestrian circulation

We Believe in

- Integrating Outdoor Curriculum Support spaces that foster exploration and engagement with nature
- Designing flexible spaces that encourage collaboration and creativity among students and staff
- Creating safe circulation paths and clear signage that prioritize pedestrian movement and ensure accessibility
- Incorporating sustainable practices that enhance the campus environment and teach students about ecological stewardship
- Providing well-lit and visible areas to promote safety and enhance community connection
- Providing safe and accessible multi modal transportation options

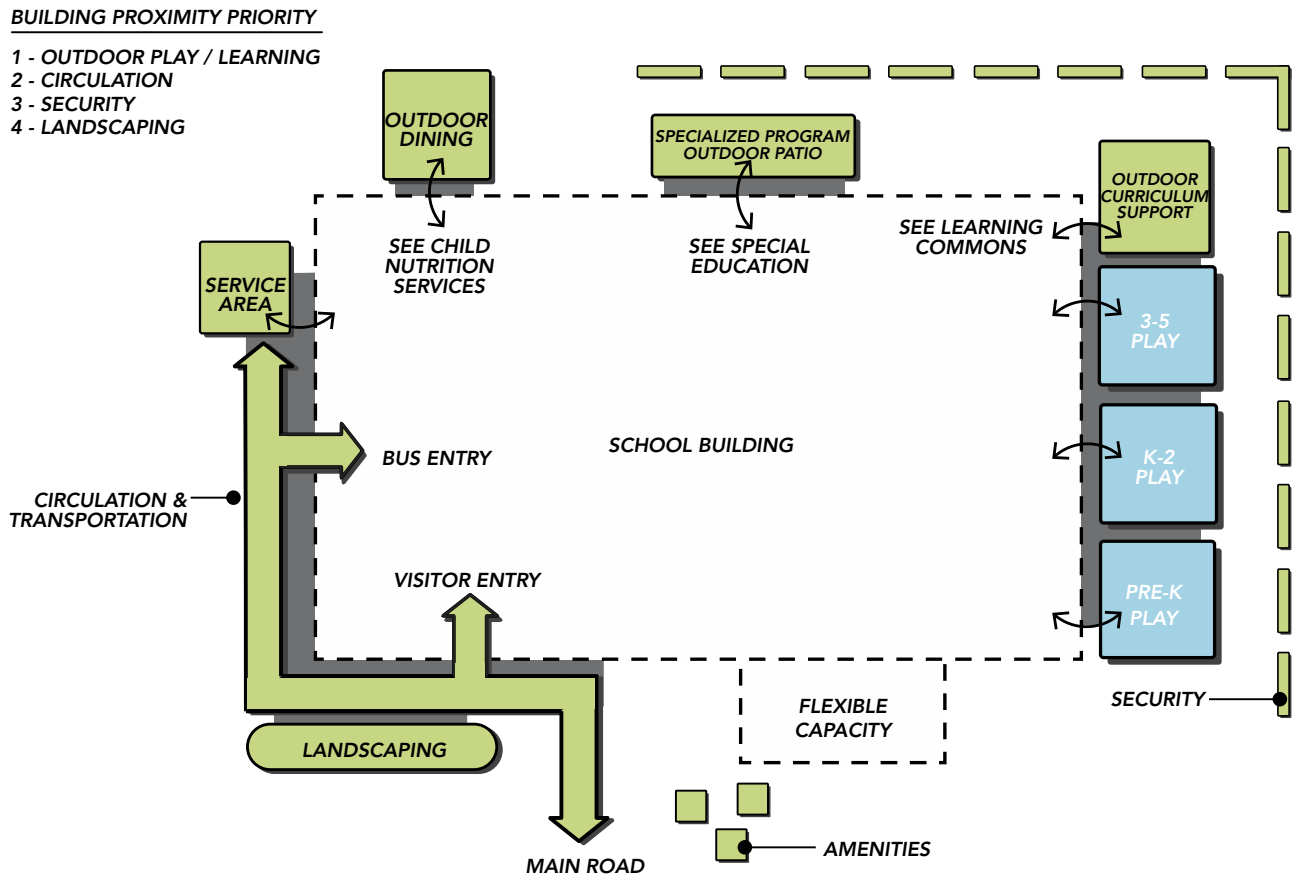


What this looks like

- Design site plan to accommodate flexibility for future school growth
- Provide shade in outdoor areas used by students
- Site design that promotes access control and clear lines of sight
- Provide security per the security guidelines
- Accessible and safe facilities that are located adjacent to convenient and adequate parking
- Walking pathways and nature spaces
- Accessible paths and seating areas with views of nature
- Identify clear access for emergency vehicles with regulatory signs and striping
- Design facilities for service and maintenance access to site utilities, waste management, school deliveries, and access to site maintenance storage facilities
- Site areas for school development can be limited. Coordinate with the District to include as many of the program areas as possible



Space Adjacencies



Refer to Space Standards for program breakdown

Space Needs

1 Orient the building on site to take advantage of natural lighting and minimize glazing for solar heat gain while utilizing building shade on Outdoor Curriculum Support and dining areas

2 Provide concrete walks that comply with Americans with Disabilities Act (ADA) extending to each outdoor play area and play field to parking areas on site and to the building

3 Each principal building on a site should have a clearly defined, inviting, and highly visible entrance featuring low maintenance plantings, shade, and seating areas to provide student and patron comfort and safety

4 Accommodate pavement design and turning radius for school buses, service and delivery trucks, commercial vans, emergency vehicles, and cars

5 Students shall not cross vehicular lanes to get to play areas or academic Outdoor Curriculum Support areas

6 Configure parking lots, vehicular drives and driveways to facilitate movement of vehicles without impacting public roads. Unique site based management should be avoided as much as possible. Provide a traffic management plan in digital format as well as included in the as-built drawing set

Circulation and Transportation

Bus Loop
» Provide shade and weather protection for students and staff at bus loading walkway
» Provide a minimum canopy length to serve at least one bus
» Provide a separate bus entry/exit drive
» Provide separate bus drop-off lanes from parent drop-off lanes
» Students in the Specialized Education program use the main bus drop off loop
» Bus drop off locations must be along a straight curb
» Provide bus parking spaces if required

Carpool Loop
» Provide canopy capable of providing shade and weather protection for students and staff at the Security Vestibule
» Defer to MSTA calculator for stacking and see Space Standards
» All carpool stacking shall be contained on campus
» Ride sharing is encouraged by the District due to limited site areas
» Vehicular Pickup/drop-off area should be near the main entrance and configured so that students will not cross traffic as they enter or leave vehicles. Students unload from right hand side of the car
» The designated ADA loading zone must comply with regulations
» Avoid double and triple stacking cars if possible
» Provide separate carpool entry and exit driveways
» Vehicular pickup / drop off area should be along a straight curb

Emergency Vehicles
» Ensure emergency vehicle access per fire code and local municipality

Parking
» See Space Standards for capacity parking requirements
» Provide 1-space per each full-time staff member
» Provide Child Nutrition Service parking, 6 spots typical
» Designate 15 additional parking spaces at the carpool area for visitor car parking area
» Locate and distribute required ADA parking spaces as close to building front door as possible in accordance with ADA and building code requirements

Bicycle and Scooters
» Provide minimum bike rack count determined from the municipality / local jurisdiction
» Bicycle racks should be visible from school building for security
» Bike riders should not ride through carpool or bus drop off areas to minimize conflicts
» Racks for scooters should also be considered

Pedestrians
» Provide concrete walkways along car and bus drop-off and loading lanes. Bus walkway should be minimum 15ft wide and carpool minimum 10ft wide
» Provide concrete pedestrian walkways
» Provide walkway connections to adjacent public walkways in street rights-of-way
» All sites must meet ADA and building code requirements
» Provide 6-inch height concrete curb and gutters to direct site storm drainage and for outlining site drives for safety and security for pedestrians
» Maintain and identify fire lane and emergency access to school facility front entrance doors
» All sidewalks must be separated from vehicular drives by a grass strip except at loading and unloading areas







Landscaping

Trees, Shrubs, and Ground cover

» Plantings to comply with requirements of local jurisdictions
» Provide plantings of trees around the site perimeter and parking lots per requirements of the local jurisdiction
» Plant trees with the goal of providing shade in areas around outdoor classrooms, walkways, and gathering areas
» Provide planting beds at main building entries designed to promote year-round visual interest and color
» Utilize flowering plant material as able to make entry inviting
» Plant groupings of trees in mulch beds when possible for better chance of survival
» Extensive planting beds are discouraged due to additional maintenance required by the District
» Organic shapes blend with existing site area and topography

Screening

» Plant evergreen and deciduous trees and shrubs for screening and as required by the local jurisdiction
» Tree size can be a safety and site visual clearance issue

Native Plantings

» Use of native plantings is encouraged for low water use and sustainability

Landscaping Features

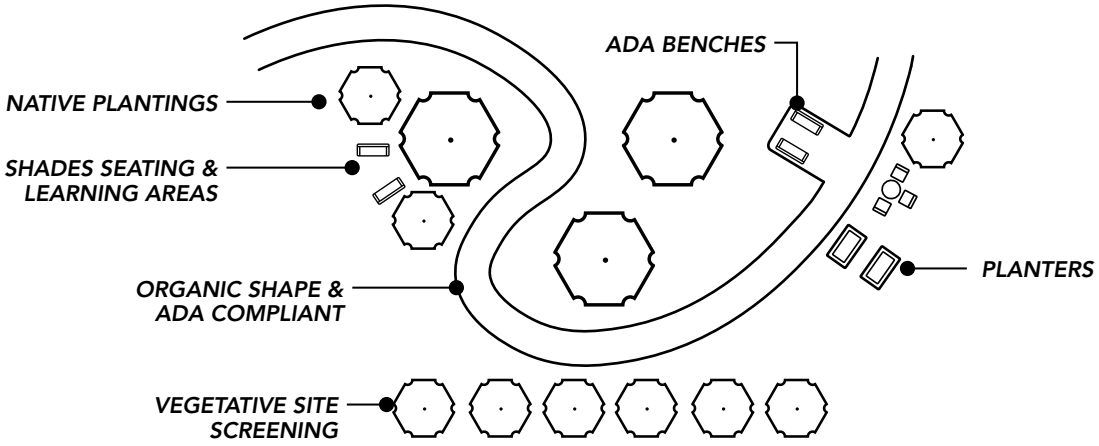
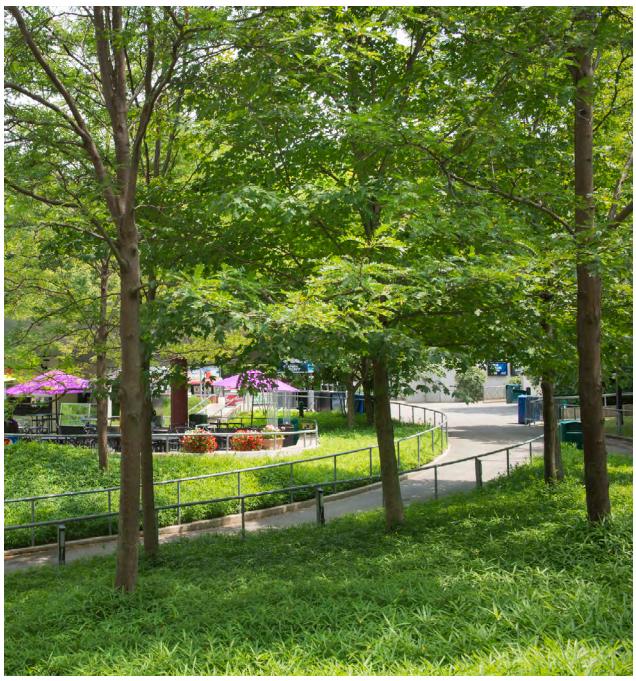
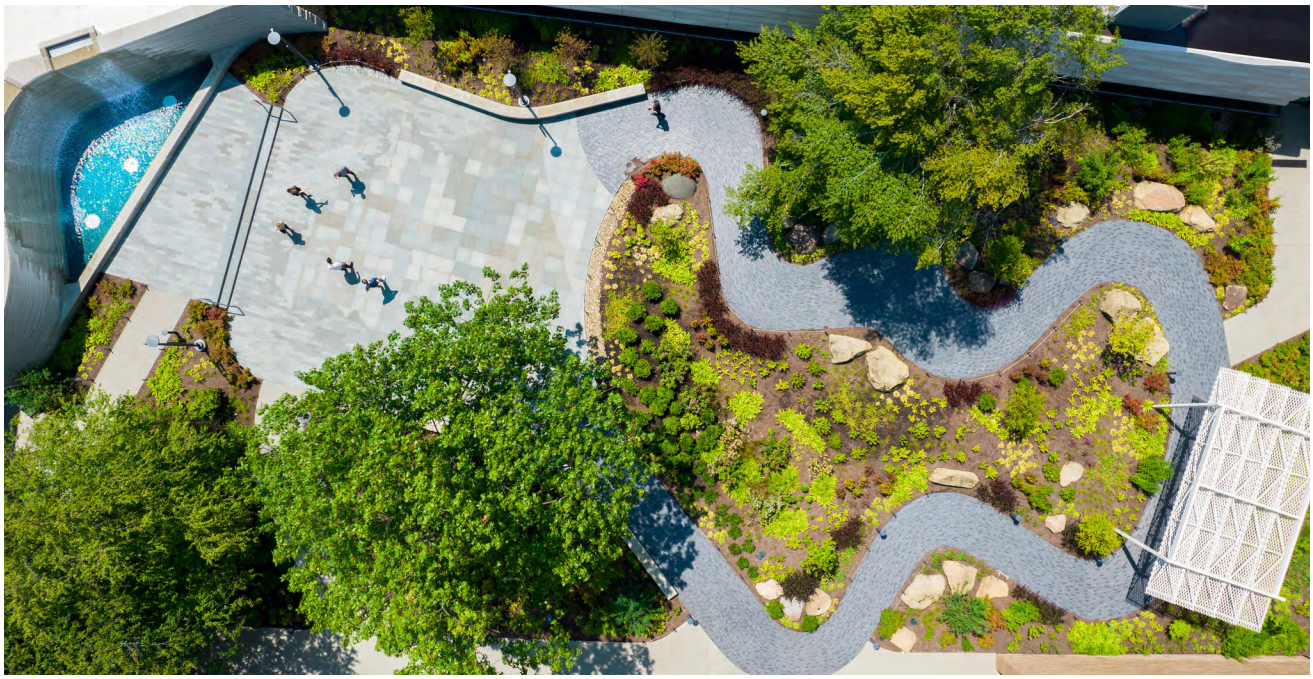


Fig.9 - Landscaping Features







Security and Maintenance

School Security
» Coordinate site design with WCPSS Safety and Security Design Guidelines
» Coordinate with site plantings of trees and maintain clear site lines from building to the site
» Coordinate with security camera locations

Perimeter Fencing
» Site perimeter fencing around the entire site should be addressed on a case by case basis
» See Design Guidelines and coordinate with the District for fence requirements
» Maintenance Access Gates: Provide double gates in key locations in perimeter fence for maintenance and emergency vehicle access
» Gates on Service Drives: Provide Knox box and key for emergency and fire equipment access to entire school site
» Review fencing type, height, and locations with the District for each site

Service Area
» Provide visual and security screening fence and gate system to enclose the trash and recycling containers
» See municipal regulations for enclosure requirements
» Provide heavy-duty pavement design in service loading areas and adequate turning radii for service vehicle maneuverability
» Bollards: Provide bollards to protect above ground utility equipment, screening enclosure corners, gates
» See 11 | Maintenance and Plant Operations for Loading Dock and Mechanical Yard

Site Utilities
» Locate mechanical, plumbing, and electrical equipment and service connections as required by local service providers. Locate this equipment in the service area when possible

Service Area Features

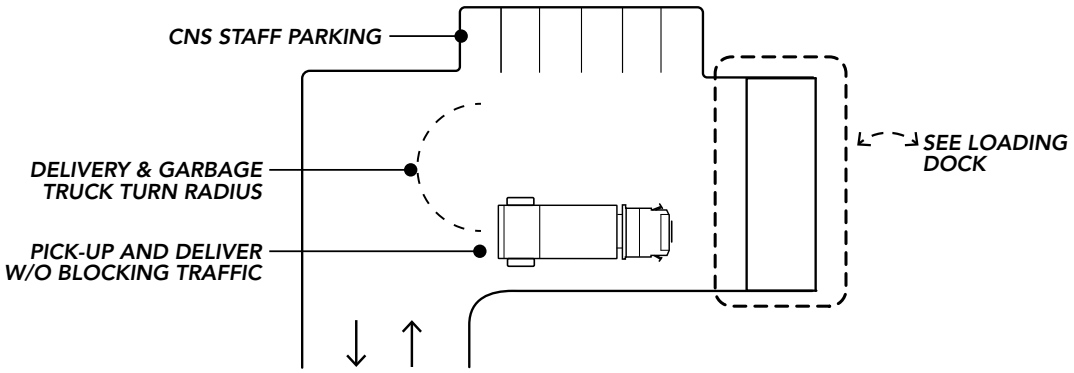


Fig.10 - Service Area Features







Amenities

Seating Systems
» Coordinate with the District for final locations and quantity
» Seating systems to be a heavy-duty, low maintenance, product
» Provide furnishings that can be surface mounted
» Avoid benches at play areas

Flagpoles
» Provide two flagpoles near the main entry plaza to the school. One for the US flag and the other for the State flag

Site Sign
» Coordinate with WCPSS to provide a site monument sign designed with the exterior finishes of the school building and the features of the school site
» The sign should be maintenance-free
» Any specialty or magnet status of a school should be a separate section of the sign that can be removed
» Sign shall comply with local ordinance
» Sign shall be two-sided, oriented perpendicular to the road, and include the address

Exterior Building Signs
» Signage shall be clearly visible and not obstructed by landscaping or other structures. It shall be located near the carpool/visitor entrance from the road
» Wayfinding signage located at intersections and key points throughout the campus shall be provided. Signage shall direct delivery drivers to the Service Area, and visitors to the front entrance and visitor parking. Wayfinding signage should also indicate carpool route, bus driveway etc.

Spirit Rock
» Plan for future placement of a spirit rock

Mailbox
» Provide a mailbox for school parcel and mail delivery

Waste/Recycling Receptacles
» Coordinate with District to determine need for waste receptacles at main building entrances
» Waste Receptacles to be a heavy-duty and low maintenance
» Provide furnishings that can be surface mounted

Site Sign

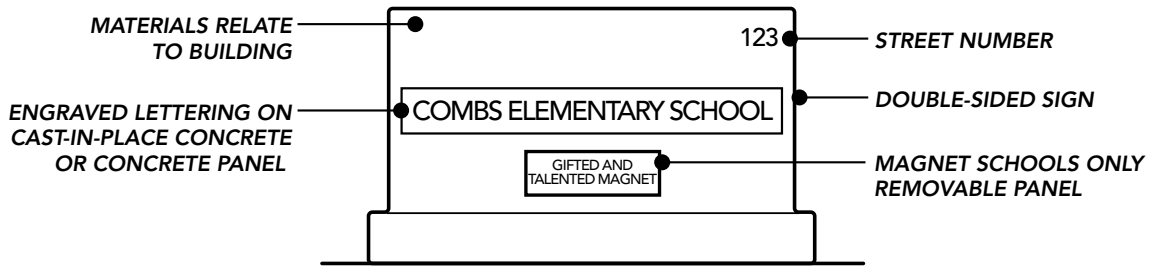


Fig.11 - Site Sign




PLEASANT PLAINS
ELEMENTARY SCHOOL
WAKE COUNTY PUBLIC SCHOOLS
1511 WOODALL CREST DRIVE
APEX, NC


MADRID ELEMENTARY SCHOOL



Part IV

Master Charts



Master Charts

Part IV- Master Charts, is a separate document that details each program space further through a series of categorized charts: Finishes, Openings, Casework, Furniture / Fixtures / Equipment (FF&E), and Mechanical / Electrical / Plumbing (MEP). Open and closed requirements related to program spaces are organized in these categories. General and program specific requirements are in narrative form, separate from the charts, and both must be accounted for during the design process.

Introduction to Master Charts

The Master Charts are utilized once the space planning phase is complete to give further requirements per spaces.

It is the responsibility of the design team to incorporate the requirements outlined in this chapter. The spaces provided directly come from Part V - Space Standards. Consult with WCPSS for unique program spaces that may not be reflected in the Space Standards or Master Charts requirements.

The Master Charts contains 6 charts that details each program space: Finishes, Openings, Casework, Furniture / Fixtures / Equipment (FF&E), and Mechanical / Electrical / Plumbing (MEP). Each chart is divided into two parts: Master Charts and general & program specific requirements. Open and closed requirements related to program spaces are organized in the Master Charts. General and program specific requirements are in narrative form, below the charts, and both must be accounted for during the design process.

	FLOOR						
	Carpet Tile	Resilient Tile	Resilient Athletic	Porcelain Tile	Quarry Tile	Epoxy Terrazzo	Sprung Wood
DEPARTMENT							
Program A	●						
Program B					●		
Program C		○		○			

LEGEND	
●	Closed Requirement
○	Open Requirement
#	Quantity, Height, Linear Feet
	Open to Design

Special Criteria - "One-off" requirements per Department

BELOW THE CHARTS
General Notes - Requirements specific for all program

Master Charts Access

Refer to the Master Charts provided by WCPSS for project-specific requirements for the following categories:

- Openings
- Finishes
- Furniture, Fixtures, & Equipment
- Casework
- Electrical
- Mechanical & Plumbing

IV Master Charts

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Part V

Space Standards



Space Standards

Part V - Space Standards is a separate document that includes model programs for elementary, middle and high schools. It provides updated program spaces, quantities and areas based on detailed review and discussion.

Introduction to Space Standards

The Space Standards are utilized to ensure the building can meet the educational, operational, and safety needs of the students and staff, while also providing flexibility for future growth. It is the responsibility of the design team to incorporate the requirements outlined in this chapter.

The Space Standards are comprised of a net program breakdown per department, with model square footages, quantity of program spaces (QTY), teaching spaces (TS), and typical occupancy (OCC) when applicable. Gross area and site program are accounted for as well. This gives the designer a “north star” to follow when working with the WCPSS Space Standards program to keep the schools within budget and as efficient as possible.

SPACE STANDARDS

56 Teaching Spaces Model

1	DEPARTMENT	OCC	TS	QTY	Area Ea. (SF)	TOTAL SF
	PROGRAM A		N	1	70	70
	PROGRAM B			1	100	100
	PROGRAM C			1	250	250
	PROGRAM D			2	130	260
	PROGRAM E			1	80	80
	PROGRAM F			2	70	140
	Subtotal Teaching Spaces=>		{0}	8		900

Space Standards Access

Refer to the Space Standards provided by WCPSS for program breakdown.

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PLAY
How can your project provid
groups with opportunities
explore, experiment, and
BIO
How can yo
influences
environmer
groups vali
health and
ACTIVE
What
prom
activ
Active Spaces
Biophilia
Evidence Based Modalities
Nourishment
Play
A HEALTH + WELL-BEING
How can intentional design features actively promote users' emotional and physical well-being and encourage them to make healthier choices?

Appendix



Appendix

The Appendix refers to two studies done in development of these ed specs, the Student and Teacher Engagement Indexes™ (SEI™ and TEI™) and the VALUES© workshop. These can be found as separate documents from the Educational Specifications. Additionally, this section acknowledges key participants, photo credits, and further resources.

Student and Teacher Engagement Surveys

In the development of these Ed Specs, Wake County Public School System solicited feedback from students and teachers about how well their newest schools function as engaging learning environments. The Student and Teacher Engagement Indexes™ (SEI™ and TEI™) show that for students of all ages, perceptions of engagement in learning activities is one of the best indicators for future academic success and a stronger life-long relationship with learning.

VALUES Workshop

As Part of the Ed Spec development, WCPSS partnered with DLR Group to conduct a day-long workshop to begin creating that vision. DLR Group facilitated the workshop with a tool called VALUES ©, an acronym for “Viewing Architecture through the Lens of User Experience and Sustainability.” VALUES © helps stakeholders identify top project goals, determine how success of these goals will be measured, and results in a values-based road map for project decision-making. DLR Group retains copyright of VALUES ©; use or reproduction is prohibited.



SEI/TEI Findings

Appendix

Acknowledgments

Wake County Board of Education
Cheryl Caulfield (District 1), Christina A Gordon (District 2), Dr. Wing Ng (District 3), Toshiba Rice (District 4), Lynn Edmonds (District 5), Sam Hershey (District 6), Chris Heagarty (District 7, Chair), Lindsay Mahaffey (District 8), Tyler Swanson (District 9, Vice Chair).

Wake County Public School System Facilities Design and Construction Team

DLR Group Educational Specification Team

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Resources

Contact Wake County Public School System's Facilities Design and Construction department for active and planned projects, bid advertisements, and available resources and information.

WCPSS Facilities Design and Construction


WAKE COUNTY
PUBLIC SCHOOL SYSTEM