Middle School Educational Specifications

Adopted 2021

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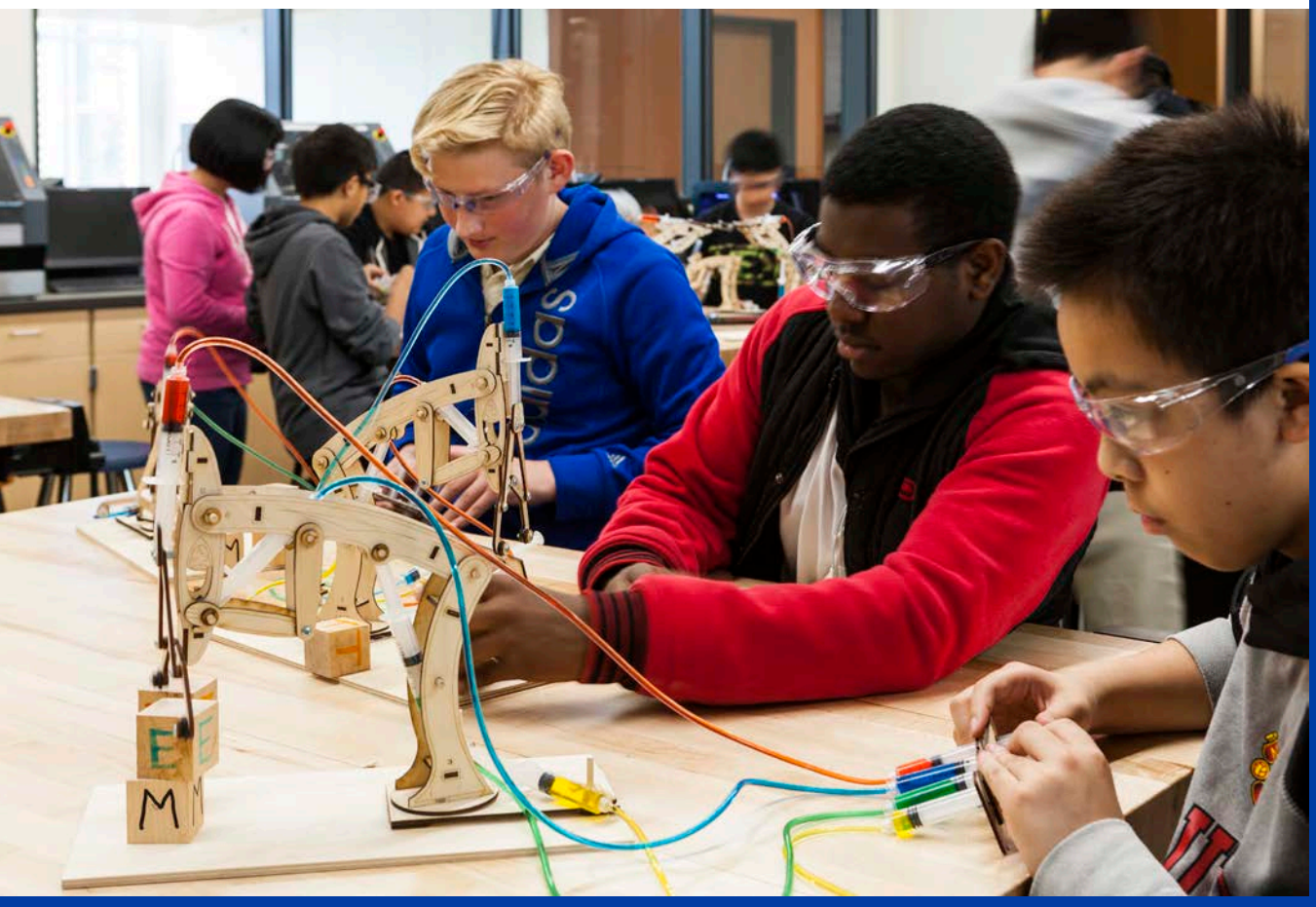
For questions and more information about this document, please contact the following:

Richard Best
Director, Capital Projects and Planning
rlbest@seattleschools.org

This 293-page document provides the district's educational specifications for middle schools as of 2021. This is a districtwide document for use in developing plans for new or renovated middle schools. This document defines the programmatic, functional, spatial, and environmental requirements of school facility. These educational specifications are intended to apply generally to the design of 1,000-student middle schools.

Middle School Educational Specifications for Seattle Public Schools

December 2021



Empower. Engage. Educate.

SEATTLE PUBLIC SCHOOLS

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Acknowledgements

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Becky Asencio	SPS K-12 Planning Coordinator
Richard Best	SPS Director of Capital Projects & Planning
Matthew Bissen	Architect, Integrus Architecture
Darcy Brixey	SPS Library Services & Instructional Materials Manager
Marni Campbell	SPS - Robert Eagle Staff Middle School Principal
Patricia Campbell	SPS Executive Director of Special Education
Paul Cathcart	SPS Senior Facilities Planner
Jeff Clark	SPS - Denny Middle School Principal
Benjamin Coulter	SPS Emergency Management Specialist
Dr. Diane DeBacker	SPS Chief Academic Officer
Lori Dunn	SPS Physical Education Manager
Chelsea Flickinger	Interior Architect, Integrus Architecture
Devin Gurley	SPS Director of Special Education
Colleen Halverson	SPS Technology Support Services Manager
Cheri Hendricks	Planner & Project Manager, SOJ | Broadview Associates
Jon Halfaker	SPS Executive Director of Schools, Secondary
Kari Hanson	SPS Director of Continuous Improvement
Pam Ivezic	SPS K-12 Instructional Services Music Coach; CAI
Samara Hoag	SPS Health Services Manager
Eric Kinzel	SPS Dept. of Technology Services, Sr. Project Manager, Infrastructure Planning
Hunter Maltais	SPS Transportation Director
Sara Mirabueno	SPS Director of School Based Operations
Paula Montgomery	SPS - Jane Addams Middle School Principal
Lillian Nolan	SPS District Registrar
Deborah Northern	SPS Equity & Engagement Manager
Lynne Oliphant	SPS Health Services Interim Asst. Manager
Sara Rigel	Seattle & King County Public Health Community & School-Based Partnerships Program Manager
Chanda Oatis	SPS - Meany Middle School Principal
Amy O'Rourke	SPS Technology Support Services Assistant
John Parker	SPS STEM Curriculum Specialist & CTE Middle School Liaison
Nancy Petersen	SPS Technology Support Services Director
Sarah Pritchett	SPS Executive Director of Schools, Secondary
Gail Sehlhorst	SPS Visual & Performing Arts Manager
Aaron Smith	SPS Nutrition Services Department Director
Chelsea Stewart	SPS Capital Projects Curriculum Coordinator
Rob Thomas	SPS Distribution Services Manager
Amy Vanderhorst	Associate Principal, Integrus Architecture
Mary Margaret Welch	SPS Science Program Manager
Rebecca Wynkoop	SPS - Robert Eagle Staff Middle School Librarian
	Numerous Mercer Middle School Students who participated in workshops during Advisories

Introduction to Middle School Educational Specification

"The built environment affects our physical health and our mental health. It affects our cognitive capabilities. And it affects the way we form and sustain communities. The built environment affects each of these facets of our lives, and because they are related to one another, it does so in ways that are mutually reinforcing."[1]

Our Conceptual Framework

For this document, we have chosen to frame the information gathered from a variety of sources into a set of four guiding questions that start with the district's mission and goals, identifying desired outcomes, and concludes with actions that can be implemented. This has allowed a broad array of principles and practices to be woven together into a comprehensive wholistic Educational Specification. The four guiding questions, and the key themes each represents, include:

What Do We Believe?

Philosophy, values, guiding principles

What Do We Know?

Current conditions, as well as research, experience, best practice, expert opinion

What Do We Want?

Ideal, ultimate goals

What Do We Do?

Action & implementation

Purpose of this district-wide Educational Specification

According to the National School Boards Association:

> *"The purpose of educational specifications is to define the programmatic, functional, spatial, and environmental requirements of the educational facility, whether new or remodeled, in written and graphic form for review, clarification, and agreement as to scope of work and design requirements by the architect, engineer, and other professionals working on the building design.*
>
> *Educational specifications must begin with a thorough, in-depth explanation of curriculum goals and instructional activities that occur within the learning environment.*
>
> *A detailed description of the educational program enables complete and accurate descriptions of functional and spatial needs and – in the end – successful design."*[2]

Often the development of an Educational Specification is focused on the program for a particular school. In this instance, this Educational Specification is intended to apply generally to the design of 1,000-student middle schools within Seattle Public Schools. Therefore, it takes into consideration best practices from a variety of sources and focus on providing a template with flexible spaces that can be adapted for various site-specific Educational Specifications.

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[1] Goldhagen, Sarah Williams, Welcome to Your World: How the Built Environment Shapes Our Lives, 2017, p. 17.
[2] See www.nsba.org/toolkit/EdSpecs.html, November 2015.

Initial Parameters

Initial parameters provided to the Educational Specification team by Capital Projects and Planning staff included the following key assumptions:

- Middle school capacity would be 1,000 students.
- Neighborhood middle schools would be planned to provide for a core of general education classes shared by all students along with exploratory offerings typical of SPS middle schools.

Educational Specification Update Process

Initial planning for updating the Middle School Educational Specification was conducted in 2019. An executive committee that included the Chief Academic Officer, Executive Directors for Secondary Schools, Capital Projects & Planning Staff, and consultants, envisioned a series of workshops with broad-based representation from middle school administrators and others in Teaching and Learning, School Operations, Facility Operations, and community partners. Also planned was a student workshop to explore which environmental qualities they find warm and welcoming.

As part of the formulation of themes to explore in the visioning workshops, the ed spec team developed a comparison of four key frameworks describing the characteristics of high-performing schools for young adolescents. These frameworks include:

- "This We Believe: Successful Schools for Young Adolescents," published by the Association for Middle Level Education.
- Turning Points 2000: Educating Adolescents in the 21st Century.
- The National Forum to Accelerate Middle-Grades Reform's vision statement (and "Schools to Watch" Rubric)
- Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform[3]

In the Section "What Do We Know" the chapter entitled "Exemplary Schools for Young Adolescents" show substantial agreement among these frameworks regarding principles and practices, and therefore how facilities should support them. A summary of the principles and practices can be found in the Appendix.

The Covid-19 pandemic triggered the closing of schools in March 2020 just before the planned workshops were scheduled. With educators reinventing teaching for remote learning, an alternative process was conducted to provide the necessary information for an update, rather than a complete re-write, of the Middle School Ed Spec. Key elements of that alternative process included:

1) Information Gathering and Research

In early 2020, members of the Educational Specification team prepared comparisons of SPS middle school programs and facilities to gain insights into the range of variables that should be accommodated within a district-wide Educational Specification.

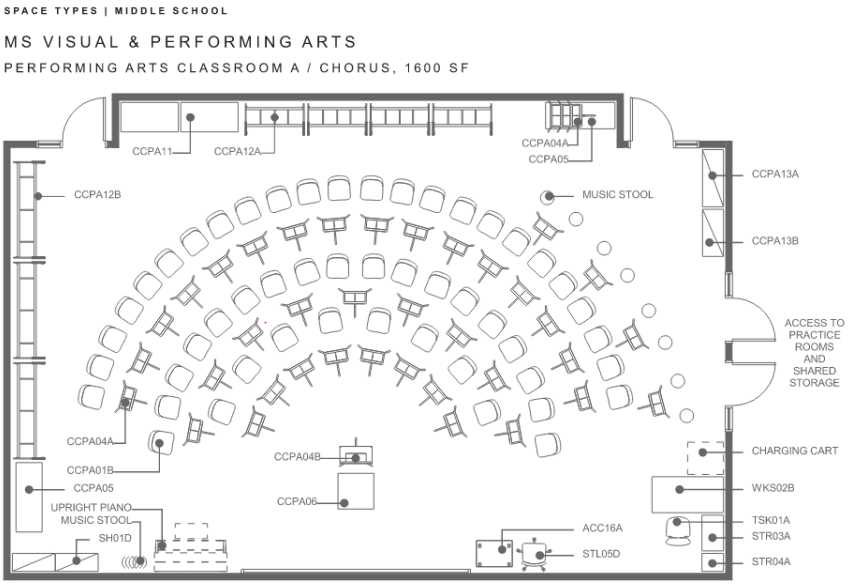
These included program areas for SPS middle school modernizations and replacements within recent capital levies to confirm equitable apportionment of spaces:

- Madison Middle School
- Denny Middle School
- Robert Eagle Staff Middle School

Key middle school programs for recently completed middle schools within the district and neighboring districts around the Puget Sound were also compared. These are identified in the section "What Do We Do: Our Program for Neighborhood Middle Schools."

A draft Program Area Summary was prepared that incorporated site-specific Ed Spec revisions from Robert Eagle Staff Middle School. Modifications were also made to the program areas to align them with the district's Standard Middle School Space Types, which were developed with input from program staff in 2018. An example of the type of information provided in that document is included here:

[3] Research Summary: Characteristics of Exemplary Schools for Young Adolescents; Andrews, P.G., Caskey, M.M. & Anfara, V.A.Jr., Curriculum and Instruction Faculty Publications, PDXScholar, 2007.



Master schedules from the district's middle schools were analyzed to determine how middle schools were utilizing their existing buildings. This analysis provided insights into why some of the middle schools need significantly more teaching stations than those in lower equity tiers. More information is provided in the section entitled "Where We Are Now - SPS Middle Schools."

In late 2020, the Ed Specs team reviewed the program, curriculum, and standards information available on the Seattle Public Schools website, including references to state standards on the OSPI website, as well as national standards such as Common Core, the NextGen Science Standards, and others. Additional information was provided by Curriculum and Instruction. This background information was used to formulate specific questions for discussion in program-specific meetings with educators. This research has also served as the foundation for the section "What Do We Know," which discusses many recent changes in expectations for middle schools, ranging from curriculum standards through instructional technologies.

2) Lessons Learned from Other Middle School Capital Projects

Post-occupancy debriefs were conducted with principals from the district's most recently completed middle school capital projects to ensure that the lessons learned from those projects are integrated into this Ed Spec update. Those projects include:

- New Robert Eagle Staff Middle School (completed 2017)
- Meany Middle School Modernization (completed 2017)
- Jane Addams Middle School Modernization (completed 2017)
- Denny Middle School Replacement (completed 2011)

Recommendations based upon those debriefs are included in the section entitled "Lessons Learned: Post-Occupancy Debriefs from Recent Middle School Projects."

3) Program-Specific Meetings with Educators

In late 2020 and early 2021, program-specific video-conference meetings were convened to discuss design considerations for each area within the middle school. These meetings focused on the recommendations of district-level managers who have broad experience across many schools and who sought input from teachers at individual schools when further detail was needed.

In general, two meetings were conducted for each program area: one to identify initial requirements, and a second to confirm understandings and to clarify any remaining questions. The areas included:

- General Education
- Science and Health Education

- Special Education
- Career and Technical Education
- Visual and Performing Arts
- Physical Education and Athletics
- Libraries and Instructional Technologies
- Student Dining and Nutrition Services
- Health Services
- Safety and Security, Risk Management
- Transportation and Distribution Services
- Facility Operations

Upon completion of each meeting, minutes were distributed to participants, so they could confirm or clarify. These minutes were then used to modify or supplement standards and expectations that were included in previous versions of the Middle School Ed Specs, or in similar chapters within the 2016 High School Ed Specs.

4) Student Engagement

The design process for Mercer Middle School provided the best opportunity for students to be engaged in workshops exploring their perspective on school design, as students knew their input could have an impact on a real-world project.

The project team formulated questions based on goals from the district's Strategic Plan:

- What would make you feel welcome at a new school?
- What types of spaces would make you feel safe?
- What would make you feel excited and inspired?
- How could your school interact with your family?
- In what ways could a school building reflect the cultural identities and values of students?

In the spring of 2021, all students at Mercer Middle School were given the opportunity to respond to these questions in two separate Advisory sessions facilitated by teachers. They utilized a web-based software program called "Padlet," with which Mercer staff and students are familiar, to post phrases and images that provided the design team with a far clearer picture of how students feel the physical environment could be an expression of the Strategic Plan goals.

A variety of their responses and images are included in the section "What Do We Know: What Students Tell Us."

Putting It All Together

"I am struck by the challenge inherent in translating the experiences we're trying to create for students into actionable spaces."
- High School Ed Spec Visioning Workshop participant

Given the broad-based input that was provided by educators as well as community and business partners during the 2016 High School Ed Specs process, it was decided to utilize that document as a template for this update. A newly envisioned district Strategic Plan and an emboldened commitment to racial equity inform "What Do We Believe?" Findings from the research, as well as lessons learned from the Post Occupancy debriefs, were used to inform the chapters under the headings "What Do We Know?" and "What Do We Want?" Many of the themes in these chapters continue to have validity for middle schools. Middle school student input, as well as information gained in the program-specific meetings, became the foundation for the program area guidelines in the "What Do We Do" chapters.

A Summary of Major Changes from the 2012 SPS Middle School Ed Spec is included in the next chapter.

Relationship of This Document to Other SPS Planning Documents

These Educational Specifications are one pillar of the standards that apply to Seattle Public Schools' Capital Projects. They should be utilized in conjunction with two companion documents to describe the full complement of requirements for capital projects:

- Seattle Public Schools Furniture Standards Workbook, December 2018: "advocate to integrate furniture planning into new facilities earlier in the design process to better inform the development of each building."[4] The standards "provide a framework for delivering well-designed educational environments that support both student learning and staff workplace experience with appropriate furniture specifications."[5] In particular, this document includes Space Type layouts that design teams should utilize in concept and early schematic design to ensure that the proportions of spaces will allow them to accommodate the intended layouts.
- Seattle Public Schools Technical Building Standards, current version 2012 with individual section updates; as of early 2021, a comprehensive document update is in progress to:
  - Better align with current sustainability and energy conservation policies and goals, and
  - Integrate the Conceptual Project Description of desired materials and systems for the BEX V Capital Levy.[6]

Site-Specific Educational Specifications

In development of Site-Specific Educational Specifications from this district-wide Educational Specification, project teams shall submit any modifications proposed for a specific project in writing to the K-12 Planning Coordinator for written approval. No program areas, primary adjacencies, or space features shall be modified without approval.

It is expected that individual program areas in the project design shall not vary from the specified areas by more than 3% without approval. In new facilities, classrooms or other spaces that are required to have a certain minimum area shall be not less than the minimum.

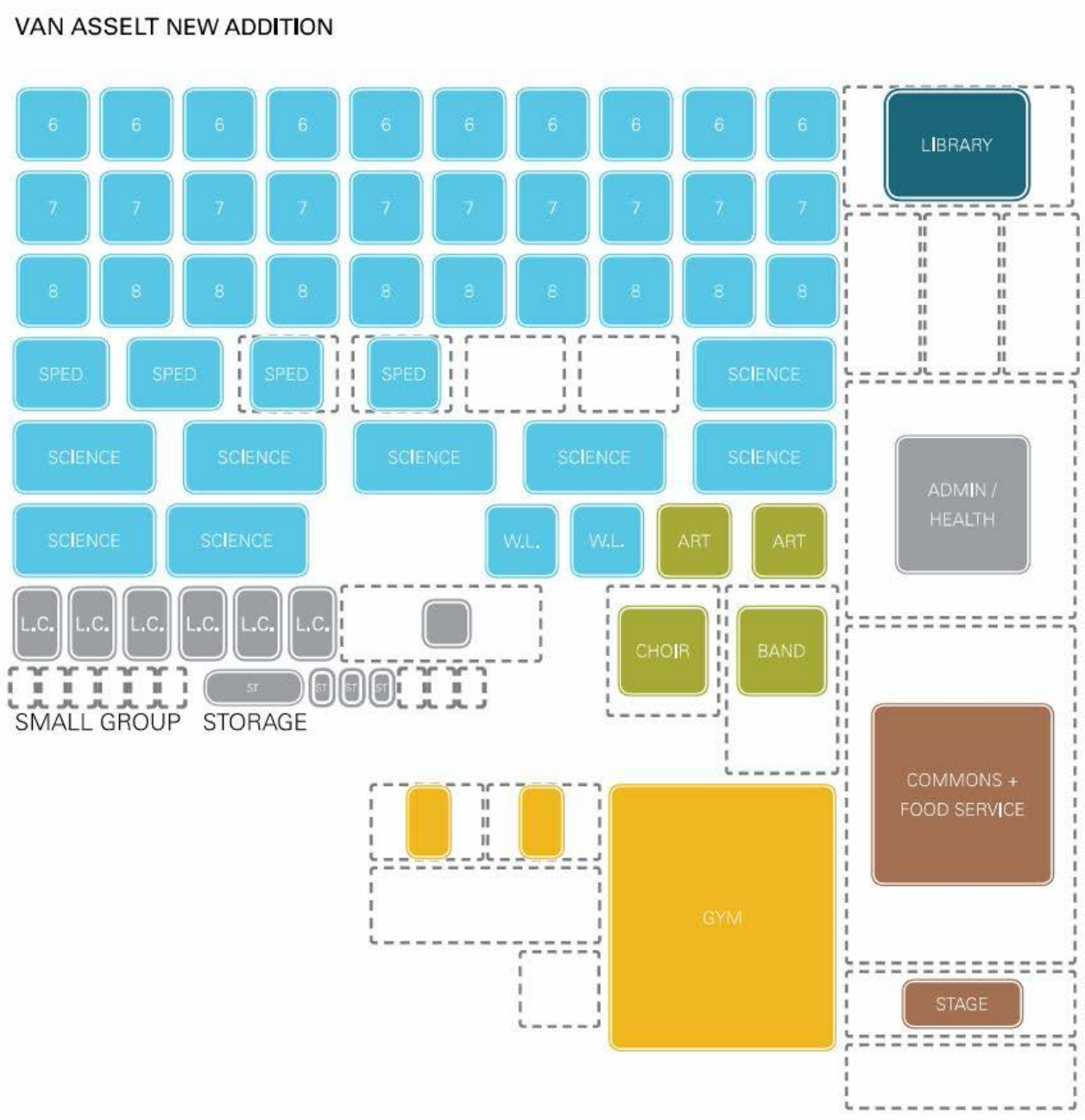
Site-Specific Educational Specifications shall include:

- The enrollment capacity for which the school is being programmed, as directed by Capital Projects and Planning.
- If an existing school, its Continuous School Improvement Plan shall be reviewed for facility implications.
- Description of the specific programs or activities that are unique to a particular school and its community.
- Description of proposed revisions to the district wide Ed Spec that accommodate those unique programs or activities, including written approvals from SPS Planning.
- A modified Program Area Summary, with revised areas, if any, highlighted.
- A graphic summary of how the modifications to program areas compare with those in this document (example on following page).
- PDF markups of the pages of this Ed Spec indicating revisions to the adjacencies or Space Features.

NOTE that the Site-Specific Educational Specifications will be forwarded to the School Board for approval. It is important that these documents are simple, straightforward, and consistent in their scope. Therefore, the Site-Specific Educational Specifications shall NOT include descriptions of the SDAT process, documentation of the SDAT meetings, or concept designs. While this documentation is an important part of the project record, it is not an appropriate part of the site-specific Educational Specifications.

[4] Seattle Public Schools Furniture Standards Workbook, December 2018, Executive Summary, p. WrkBk-1.
[5] Ibid, Design Intent, p. WrkBk-5.
[6] Seattle Public Schools Request for Qualifications RFQ102032 Technical Building Standards for SPS.

Example: A graphic summary of program areas comparison used in the SPS BEX V Master Planning.



Summary of Major Changes From Previous Version

This update to the Seattle Public Schools Educational Specifications for Middle Schools includes significant modifications and enhancements to the version published in 2011/12. Revisions include the following:

1) The Strategic Plan Forms the Foundation

An effective Educational Specification should be based upon the philosophy, values and beliefs that are expressed in the District's Strategic Plan. This Educational Specification has been restructured with the 2019-2024 Strategic Plan as the foundation, and builds recommendations based upon the plan along with a focus on equity.

2) Recommendations Grounded in Research and Best Practices

A comparison of four key frameworks identifying characteristics of high-performing middle schools demonstrated substantial consistency in principles and practices that have implications for the design of learning environments. Those implications are included in the section entitled "Exemplary Schools for Young Adolescents," and more detail on the characteristics is included in the Appendix entitled "Four Key Frameworks for High-Performing Middle Schools." Many of the recommendations made in these Educational Specifications are grounded in these best practices.

3) Integrates Lessons Learned from Previous Middle School Projects

As mentioned in the Introduction, post-occupancy debriefs with principals from the district's four most recently completed middle school capital projects were conducted, and recommendations from those debriefs are summarized in the section entitled "Lessons Learned: Post-Occupancy Debriefs from Recent Middle School Projects." They are also integrated into the Program Space Guidelines for individual spaces.

4) Educational Program Descriptions and Activities

The previous version provided instructions for the size and types of spaces desired, but did not provide design teams with any information about curriculum or program activities. Each Program Space section now includes information about the group sizes and activities to be accommodated so that design teams have a basis for evaluating whether their proposed configurations will adequately serve the program activities.

5) Program Space Changes

Significant revisions to program spaces include these:

- **Dedicated Areas Allowed for Neighborhood Learning Commons:** the previous version showed General Education classrooms organized around a learning commons, but assumed that any square footage for these areas would be drawn from circulation space, resulting in inadequate space for these important areas. The update includes six Learning Commons with an allowance of 600 square feet each, for **an additional 3,600 square feet.**
- **Additional Spaces for Small Group and "Breakout" Activities**: the previous version provided for only three 200 SF Small Group Collaboration spaces. The update includes a total of six of these spaces, plus four 120 SF MTSS Breakout Rooms to support a variety of individual or small group activities, for **an additional 1,080 square feet.**
- **Additional World Language classroom**: a review of master schedules for SPS middle schools indicated that most need three classrooms for their World Language offerings, so **an additional classroom of 900 square feet** has been included.
- **Additional Special Education classrooms**: the number of students requiring special education services has continued to grow over the last ten years. In the previous Ed Spec, three full size Special Education classrooms were included,

along with an allowance for three "Flex Classrooms" that could be assigned to Special Education if needed. Since additional Special Education classrooms are consistently needed, it was agreed to assign three full-size and two half-size classrooms for the various levels of Special Education services. The number of Flex Classrooms has been reduced to partially offset the increase, for **an additional of 1,100 square feet.**

- **Universal Labs for Career and Technical Education (CTE):** It has been agreed that universal labs that are the same size and interchangeable with Science Labs will serve the middle school programs better than specialized labs that are customized and expensive to modify. While the previous version required three CTE labs, middle school schedules indicated students are not taking that many sections of CTE courses, so it has been determined that two labs are sufficient. This has resulted in **a reduction of 2,300 square feet.**
- **Dedicated Computer Labs adjacent to the Library have been eliminated,** now that all students have devices on a 1:1 basis and basic computer instruction is no longer needed, resulting in **a reduction of 2,000 square feet.**
- **Performing Arts:** The size of the stage has been increased to allow for "wings" to support drama programs, for **an addition of 600 square feet.**
- **Community and Family Engagement Suite:** To provide authentic support for community partners, family engagement, and students experiencing homelessness, a Family & Community Partner Support suite is recommended, increasing the 200 square feet previously dedicated to a PTA Room to a total of 1,905 SF, **for an increase of ~1,700 square feet.**
- **Adequate Allowance for Circulation:** The Post Occupancy Debriefs identified a significant challenge for middle schools, which typically have a passing period of only 5 minutes. When hallways and stairs are of insufficient width, it is difficult for students to get to class on time, and the compression of bodies can create conflicts among students. An additional 5% multiplication factor applied to the Assignable Program Areas has been added to allow adequate circulation, for **an increase of approximately 6,000 square feet.**
- **Realistic Area Allowances for Mechanical and Electrical Systems:** The previous Ed Specs allowed only 3,500 square feet for mechanical rooms on occupied floors. Given the district's standard for enclosed mechanical and electrical rooms, and the type of mechanical and equipment that is required, the allotted square footage was unrealistic. Estimates of square footage required for these spaces have been provided by Hargis Engineers, who has completed a significant majority of SPS projects in the last ten years. This resulted in **an increase of ~11,500 square feet.**

6) Additional Resources

- Alternative Capacity Model for High Needs Schools: As described in the section "What Do We Know: Where We Are Now," some SPS middle schools have higher percentages of students served in bilingual programs, higher percentages of students requiring Special Education services, and other factors resulting in smaller class sizes and lower space utilization rates. An alternative model presenting the upper range of site-specific adjustments that may be necessary for higher needs schools is provided as an Appendix. Capital projects managers and design teams should work with SPS Capital Planning to determine which, if any, of the adjustments apply to a particular school project.
- SPS Reference Information: An effort has been made to include standard reference information that every design team needs, but which each team has typically had to separately request from individual departments. Examples include school bus and delivery truck dimensions, copier and printer electrical and space requirements, and others. These are included in Appendices for easy access.

What Do We Believe?

2019-2024 Strategic Plan: Four Priorities, Twelve Measurable Goals

SEATTLE EXCELLENCE
Educate. Engage. Empower.

In March of 2019, the Seattle Public Schools Board approved the following Strategic Plan for 2019-2024.[1]

Seattle Excellence, the district's five-year strategic plan, is guided by four priorities and is focused on supporting Students of Color who are furthest away from educational justice, beginning with African American boys and teens.

The strategic plan is not about changing students. It is about changing broken systems and undoing legacies of racism in public education. By actively becoming an anti-racist educational system - and ensuring students furthest away from educational justice thrive - conditions in Seattle Public Schools will improve for all.

Seattle Excellence is guided by the vision and principles of targeted universalism—with specific focus on African American boys and teens meeting academic goals, which will result in greater academic success for all students.

Seattle Public Schools are working to dramatically improve academic and life outcomes for Students of Color by disrupting the legacies of racism in our educational system. This work supports our commitment to make sure every student graduates prepared for college, a career, and community participation.

Mission

Seattle Public Schools is committed to eliminating opportunity gaps to ensure access and provide excellence in education for every student.

Vision

Every Seattle Public Schools' student receives a high-quality, world-class education and graduates prepared for college, career, and community.

Theory of Action

WHEN WE FOCUS on ensuring racial equity in our educational system, unapologetically address the needs of students of color who are furthest from educational justice, and work to undo the legacies of racism in our educational system…

By doing the following:

- Allocating resources strategically through a racial equity framework
- Delivering high-quality, standards-aligned instruction across all abilities and a continuum of services for learners
- Creating healthy, supportive, culturally responsive environments from the classroom to central office
- Directly and consistently working in partnership with families and communities who represent students of color who are

[1] This section, including the Priorities and Measurable Goals, excerpted from the 2019-24 SPS Strategic Plan approved by the School Board and available as a pdf document at SPS > Our District > About Seattle Public Schools > Seattle Excellence.

furthest from educational justice; and
- Making clear commitments and delivering on them

Then we will eliminate opportunity and achievement gaps and every student will receive a high-quality, world-class education.

To achieve educational justice, SPS strives to provide safe learning environments, curriculum that incorporates a student's life experiences and culture, and instruction delivered by high-quality, culturally responsive educators. Unfortunately, many students from certain ethnicities have not historically experienced equitable opportunities for all or part of their educational journey (including African and African American, Asian Pacific Islander and Pacific Islander, LatinX, and Native American students). These students are our priority – with an intentional focus on African American males.

Our Theory of Action is guided by the principles of "Targeted Universalism." Our universal goal is every Seattle Public Schools' student receives a high-quality, world- class education and graduates prepared for college, career, and community. Targeted Universalism holds that targeted and differentiated efforts are required to meet the needs of specific student populations, so every student meets the universal goal. By focusing on students of color who are furthest from educational justice, especially African American males, we will make the greatest progress toward our collective vision.

We believe that an intentional focus on African American males will ultimately benefit every student. We will refine our systems and structures that will ultimately be used to better meet the needs of students throughout SPS. We will also learn how to develop and provide differentiated efforts to meet the needs of specific populations, allowing us to better serve the needs of additional student populations.

Priorities and Measurable Goals

Priority: High-Quality Instruction and Learning Experiences

Educate the whole child[2] through high-quality instruction[3] and learning experiences that accelerate growth for students of color who are furthest from educational justice, with an intentional focus on African American males.

We will recognize and serve the academic, social, cultural, emotional, and behavioral strengths and needs of students, providing high-quality, culturally responsive[4] instruction, curriculum, and social-emotional learning supports delivered by educators who set high expectations, so students graduate ready for college, career, and community.

Goals	Measures Used to Evaluate Success
Students of color who are furthest from educational justice will feel safe and welcome in school	Student culture and climate surveys Attendance Discipline Equitable access to services (i.e., special education, English language learners, and highly capable)
Students of color who are furthest from educational justice will read at grade level by 3rd grade	3rd grade SBA ELA proficiency

[2] Whole child education goes beyond a focus on academic achievement. When educators focus on educating the whole child, students are healthy, safe, engaged, supported, and challenged. In Seattle Public Schools, this means that we appreciate and serve the academic, social, emotional, and behavioral strengths and needs of students, which we believe comprise the needs of the "whole child."

[3] High-quality instruction is focused on student-centered learning and achievement, intentional about student engagement, and aligned to standards with consistent and appropriate feedback.

[4] At its foundation, culturally responsive education means that students are in an environment where they have the individual safety and comfort to learn within a classroom that has a common culture that is respectful of all backgrounds.

Students of color who are furthest from educational justice will be proficient in mathematics in 5th grade and 7th grade	5th and 7th grade SBA Mathematics proficiency
Students of color who are furthest from educational justice will finish 9th grade on track for on-time graduation	At least six credits by the end of 9th grade
Students of color who are furthest from educational justice will graduate ready for college and career	SBA SAT / ACT Advanced coursework completion CTE course pathway completion College enrollment without developmental courses

Priority: Predictable and Consistent Operational Systems

Develop operational systems that provide a predictable and consistent experience to meet the needs of students and families and allow them to focus on learning.

We will manage district operational functions (non-academic/non-instructional: e.g., transportation, nutrition services, student assignment) in a culturally responsive, service-oriented, and cost-effective manner. We will ensure operational teams plan, establish, communicate, and consistently meet high service levels that provide school leaders, students, and families the information and daily experience that allows them to experience a safe and productive day of learning.

Goals	Measures Used to Evaluate Success
Operational functions will identify main customers and increase satisfaction	Department customer satisfaction surveys Timely response feedback
Operational functions will improve communication to school leaders, families, and students	School leader, family, and student awareness surveys
Operational functions will improve overall performance in support of student learning	Overall service quality level informed by performance indicators unique to each individual operational function

Priority: Culturally Responsive Workforce

Develop a culturally responsive workforce so teachers, leaders, and staff will effectively support students and families.

We will recruit a diverse workforce representative of our broader community using proven local and national best practices and focus on the retention of educators of color. We will also continue to develop culturally responsive mindsets and capabilities with all team members so there is a warm, welcoming environment in every classroom, school, and throughout central office to support student learning.

Goals	Measures Used to Evaluate Success
Staff will improve their culturally responsive professional practice	Cultural responsiveness training completion School and central office staff working condition surveys Student and family culture and climate surveys Equitable access to services (i.e., special education, English language learners, and highly capable)
The diversity of staff and leadership at schools and the central office will increase	Staff demographics Recruitment, selection, and retention of staff of color

Priority: Inclusive and Authentic Engagement

Partner with students, families, and communities who are furthest from educational justice by conducting inclusive and authentic engagement.

We will proactively and consistently work in partnership with students, families, and communities to identify needs, determine solutions, and support the implementation of the initiatives that will best meet the needs of students of color who are furthest from educational justice. We will use culturally responsive ways to engage so we build trusting relationships and empower the voices of those who can help us meet these needs.

Goals	Measures Used to Evaluate Success
Students of color who are furthest from educational justice will have meaningful voice and leadership in school and district initiatives	Representation in school-based leadership groups Student participation surveys
Families and communities who represent students of color who are furthest from educational justice will have meaningful voice in school and district initiatives	Family participation surveys Community partner participation surveys Presence in community (e.g., # of meetings in community/ feedback loop)

SPS Foundational Beliefs[5]

The Strategic Plan rests upon these Foundational Beliefs:

In Seattle Public Schools, we understand that a shared vision of practice is essential to fostering the learning communities that each of our students and adults needs to thrive. This shared vision enables educators to work in concert to build their practice with a focus on student learning.

As such, we believe that…

1. Teaching is intellectually complex, difficult, and demanding work, and the development of skillful teaching requires deep collaboration and non-defensive self-examination of practice in relation to student results.

   This requires collaborative inquiry – educators working together to examine practice through a cycle of planning, teaching, reflecting, and applying.

   The total environment of a school has a powerful effect on students' learning, which reinforces that need for collaborative inquiry.

2. By collaborating with families in authentic partnerships, we create a path for students to reach their highest potential, engaging with families as the first and lifelong teachers of students. We believe:

   - All families have dreams for their children and want the best for them.
   - All families have the capacity to support their children's learning.
   - Families and school staff are equal partners.
   - The responsibility for cultivating and sustaining partnerships rests primarily with school staff.

3. "Intelligence" is not a fixed, inborn trait. All children come to school with cultural capital and intelligence, and all have the raw material to learn rigorous academic material at high standards. Therefore, our work is to build students' academic mindset so that they each believe:

   - I belong to this academic community.
   - I can succeed at this.
   - My ability and competence grow with my effort.
   - The work has value for me.

4. By recognizing and cultivating the gifts and strengths of every student, we will remove barriers and implicit biases that impede

[5] This section excerpted from the SPS website > Our District > About Seattle Public Schools > Initiatives and Core Commitments > SPS Foundational Beliefs, accessed February 2021.

student self-actualization, fostering learning environments where students transcend racial stereotypes and thrive.

We accomplish this work by building dynamic and meaningful relationships with our students, taking the stance of a warm demander – high demand with deep care.

Through these relationships we accomplish the work of moving students from dependent to independent and interdependent learners, focusing our work on building students' intellectual capacity.

5. Racism in our society exerts a downward force on the experiences and achievement of students of color that must be met with active countermeasures.

   To ensure that race is not a predictor of success and to reach our goal of racial equity, we need to become culturally responsive and actively anti-racist practitioners. This means we engage in our own racial identity work, explore, and interrupt our implicit biases, build our understanding of how culture operates in our classrooms, and build actively anti-racist practices.

   Our commitment to these beliefs is the route to institutionalizing racial equity and fostering a context where each child receives what they need to develop to their full academic and social potential, and we make educational equity and justice the cornerstone of our system.

Ensuring Educational and Racial Equity School Board Policy #0030[6]

Seattle Public Schools has made eight commitments to the success of every student in each of our schools.

Equitable Access

The district shall provide every student with equitable access to a high-quality curriculum, support, facilities, and other educational resources, even when this means differentiating resource allocation.

Racial Equity Analysis

The district shall review existing policies, programs, professional development and procedures to ensure the promotion of racial equity, and all applicable new policies, programs and procedures will be developed using a racial equity analysis tool.

Workforce Equity

The district shall actively work to have the teacher and administrator workforce be balanced and reflect the diversity of the student body. The district shall recruit, employ, support and retain a workforce that includes racial, gender, and linguistic diversity, as well as culturally competent administrative, instructional and support personnel.

Professional Development

The district shall provide professional development to strengthen employees· knowledge and skills for eliminating opportunity gaps and other disparities in achievement.

Welcoming School Environments

The district shall ensure that each school creates a welcoming culture and inclusive environment that reflects and supports the diversity of the district's student population, their families and community.

Partnerships

The district will include other partners who have demonstrated culturally specific expertise -including families, government agencies, institutes of higher learning, early childhood education organizations, community-based organizations, businesses, and the community in general - in meeting our high goals for educational outcomes.

[6] SPS Website > Our District > About Seattle Public Schools > Initiatives and Core Commitments > Policy 0030, Feb. 2021.

Multiple Pathways to Success

The district shall provide multiple pathways to success in order to meet the needs of the diverse student body, and shall actively encourage, support and expect high academic achievement for all students.

Recognizing Diversity

Consistent with state regulations and district policy and within budgetary considerations, the district shall provide materials and assessments that reflect the diversity of students and staff, and which are geared towards the understanding and appreciation of culture, class, language, ethnicity, and other differences that contribute to the uniqueness of each student and staff member.

Seattle Public Schools is committed to knowing every student by story, strength and need. Students whose history and heritage are appreciated and celebrated will learn better and be more successful.

Implications for Middle School Projects

Safe, Welcoming & Culturally Responsive Environments: Before the pandemic, the Ed Specs project team had proposed to conduct student workshops to explore which qualities of the learning environment make students of color, in particular, feel safe and welcome. It is likely there are some qualities, such as daylighting, that are universal among students from all cultures, but it is also likely that there are qualities, such as the meaning of different colors, geometries, and/or symbols, that vary widely among cultures. Since the Ed Specs team was unable to explore these with students, we strongly encourage design teams to do so within the development of the Site-Specific Educational Specifications for each project.

High Quality Instruction & Learning Experiences:

- "Students of color who are furthest from educational justice will be proficient in mathematics in…7th grade." To meet this goal, additional small group or half-size classrooms are provided for intervention support. Our proposed program areas include increased numbers of half-size classrooms and small group breakout spaces.
- "Students of color who are furthest from educational justice will graduate ready for college and career." Based upon feedback from SPS' Director of Continuous Improvement, the proposed program areas include additional open and enclosed small group spaces distributed among the academic areas of the school to support the Multi-Tier System of Supports (MTSS), a primary strategy for meeting the High-Quality Instruction goals.

Enhancing Equity through the Educational Specifications

In the development of these Educational Specifications, we have compared middle schools through different lenses, providing insights into existing differences, and forming the basis for our recommendations:

1. **Middle School Global Characteristics Comparison:**

   a) Number of Academic Periods during the School Day: More than half of the district's middle schools use a 6-period day, but Mercer and Aki Kurose (as well as at least two others) use a 7-period day. The capacity model included in the section entitled "What Do We Do: Our Program for Neighborhood Middle Schools" is based upon a 6-period day, which requires more teaching stations. All middle schools allow only five-minute passing periods, so providing adequate circulation space is critical.

   b) Advisories: Most of the middle schools offer advisories four or even five days per week, but some offer one or none. All middle schools currently schedule advisories for whole-class-size groups, so no additional spaces for smaller advisories are needed, or recommended.

   c) Demographics:

      i) Special Education: SPS middle schools vary from 10% to 20% in their percentage of students provided Special Education services. With such significant variability among schools, a "typical" set of Special Education spaces has been developed in agreement with the Special Education department, but adjustments may be needed in the Site-Specific Ed Specs process.

ii) Bilingual education: Middle schools also vary from 2% to 25% of students served. Dedicated classrooms for Bilingual Education (ELL) have not been proposed; rather, a larger number of full- and half-sized "flex classrooms" has been proposed to serve this varying need. The District Registrar can assist in determining if this quantity of spaces needs to be adjusted during the Site-Specific Ed Specs process.

d) School-Based Health Centers: Less than half of the middle schools currently have School-Based Health Centers, but eventually these will be funded at all middle schools, so space has been included in these Ed Specs.

2. **Middle School Master Schedules & Capacity Utilization:**

a) A review of the master schedules for most SPS middle schools revealed that some high needs schools had class sizes that were significantly smaller than those in the "typical" SPS middle school, due to grant funding or other resources. As a result, additional full- and half-size "flex classrooms" have been proposed to allow for more teaching stations in the High Needs Capacity Model - see Appendix.

b) Inequities among program offerings across middle schools were also identified. For example, some offer far more music courses than others. These Ed Specs propose a comparable set of music spaces for all middle school projects, so that a more equitable set of offerings can be grown over time.

3. **Middle School Program Area Summaries:**
A comparison of the spaces provided for each of the SPS middle schools that have been replaced since 2000 was conducted, including:

a) Madison, Denny, and Robert Eagle Staff Middle Schools. Recommended square footage allotments for spaces have been based upon this comparison.

b) Select spaces were also compared to other examples of middle schools replaced in Puget Sound region districts in the last several years, to confirm that SPS space allotments are within "industry standard."

In addition, there are other drivers for supporting more equitable practices that include:

All-gender toilet rooms are recommended in addition to traditional gendered toilet rooms that are still necessary to serve the needs of students whose cultures require gender separation.

Community partner spaces provides for office and meeting space to support the partners that are critical to the success of the whole-school community.

A family engagement room and other spaces to support students and families experiencing homelessness.

What Do We Know?

What Do We Know:
New Standards, New Priorities

Public school education is such a strong shared cultural experience that most people think they understand it, and that little has changed.
- Dr. Michael G. Warden[1]

Starting with the previous 2019-2024 Strategic Plan section, the sections labeled with the banner question "What Do We Know?" describe relevant trends within Seattle Public Schools and its programs, and more importantly, identify shifts that have been occurring in the adoption of new standards, new curriculum and pedagogy, new insights, new priorities, and new technologies. To avoid assumptions that middle schools should be designed just like they always have been, particular care has been taken to identify the many ways in which expectations have changed.

Specific themes include:

- 2019-2024 Strategic Plan: Four Priorities, Twelve Measurable Goals
- Where We Are Now: SPS Middle Schools
- Exemplary Schools for Young Adolescents
- Curriculum & Pedagogy
- State Learning Standards
- Adoption of NextGen Science Standards
- Elevating & Integrating the Arts
- Moving to Promote Lifelong Fitness
- Planning for Tomorrow's Technology Needs
- Environmental Conditions Critical for Learning

These themes provide the foundation for the spatial recommendations presented in the subsequent section, "What Do We Do?"

[1] Dr. Michael G. Warden, former Assistant Superintendent, Edmonds School District

Where We Are Now:
Seattle Public Schools - Middle Schools

Seattle Public Schools is the largest K-12 school system in Washington State. The most recent data publicly available for the district is for the 2020-21 school year, and includes:

Seattle Public Schools Fast Facts[1]

Our Students

Total Enrollment	52,381
Male	51.5%
Female	48.2%
Non-Binary	0.3%
Countries of Origin	154
Languages / Dialects	154
Non-English-Speaking Background	20.6%
English Language Learners	12.2%
Free / Reduced Price Meal Eligible	32.1%
Students Experiencing Homelessness	3.8%
Special Education	13%
Ethnicity:	
- Caucasian	46.02%
- Black or African American	14.74%
- Asian	13.00%
- Hispanic/Latino	13.11%
- Multiracial	12.31%
- American Indian/Alaska Native	0.42%
- Native Hawaiian/Pacific Islander	0.40%

By Grade Level

Elementary (K-5)	25,528
Middle (6-8)	12,025
High School	14,828

Our Staff

Total Full Time (FTE) (FY 19-20)	8,691
Educators (includes all school-based staff)	5,809

Our Budget

General Fund (FY 21-22)	$1.13 billion

[1] 2020-21 Fast Facts, SPS website > Our District > About Seattle Public Schools, accessed November 2021.

Seattle Public Middle Schools

Middle school students comprise 22% of total district enrollment and attend school in twelve comprehensive middle schools as well as ten K-8 schools.[2]

Middle school enrollment has risen by 7.7% between 2015 and 2018, even though overall K-12 enrollment decreased slightly (by less than ½ percent).[3] Demographics data for middle schools indicates that between 2015 and 2018:

Special Education Enrollment varied from 12 to 14%

Bilingual Eligibility hovered between 9 and 10%

Increasing numbers of students eligible for both Special Education and Bilingual programs (ELL) drive increases in the total number of teaching stations required within the middle school, as many of these special programs have class sizes that are smaller than the typical 28-student class size assumed for General Education classes.

The number of middle school students eligible for free- and reduced-price meals has dropped from 39.2% to 33.7% between 2015 and 2018, but not because families are doing better. Rather, "Increasing enrollment since 2014-15 and increasing living costs in the city of Seattle have lowered the overall percentage of students eligible for free- or reduced-price lunches…"[4] As noted in a 2016 review of SPS Nutrition Services, current middle school facilities are not adequately serving the needs of students eligible for these meals.[5] With the pandemic, unemployment and families in need of assistance had more than doubled. During the planning process, it is recommended that design teams verify with SPS how many students are eligible for free- or reduced-price meals.

District-Wide Middle School Educational Specifications

This Educational Specification describes program requirements for comprehensive middle schools serving Grades 6 - 8 within Seattle Public Schools. It is intended to serve as a "District-Wide" document applicable to any comprehensive middle school within the district.

The optimal middle school capacity to support student learning is 1,000 students, a maximum which was developed by educators and other district staff.[6]

Observations from a Comparison of SPS Middle Schools

A comparison of key characteristics of Seattle Public Middle Schools was compiled with the purpose of confirming that a district-wide Middle School Educational Specification would describe a broad set of requirements to accommodate SPS comprehensive middle schools.

A substantial amount of variability was observed across the twelve regular middle schools. Refer to the **"**SPS Middle School Comparison**"** table included herein, which is based on data from the 2019-20 school year.

Program and Service Variability: Since the district's Strategic Plan and Racial Equity policy call upon all of us to review existing programs and procedures to ensure the promotion of racial equity, we find some programmatic variability which raises questions about equity among programs:

- A few schools offer special programs such as Dual Language Immersion and/or an International program that increase the number of World Language offerings, but most do not.
- Most programs offer student advisories four or five days per week; some offer advisories only once per week, and one program does not appear to offer any advisory at all.
- Some schools offer several world language choices, while others appear to offer only one.

[2] SPS website > Departments > Technology Services > Data Reporting > Data Profile: District Summary > Data Profile Demographics > Demographics Data Tables, accessed February 2021.
[3] Ibid.
[4] Ibid.
[5] Study of the Nutrition Services Department for Seattle Public Schools, April 2016, Prismatic Services, Inc.
[6] SPS website > Departments > Enrollment Planning > School Boundary Changes > Mercer Middle School: Topic "Middle School Construction," accessed February 2021.

- Some schools offer several arts and music classes, while other schools have very limited offerings.
- Most programs are based upon a 6-period schedule, while at least four use a 7-period schedule.
- Some schools provide three 30-minute lunch periods, and some (not just the smallest schools) offer only two 30-minute lunch periods.
- At some schools, a significant number of students who are eligible for free and reduced-price meals are not being fed.[7]

To address some of these disparities, these Educational Specifications make **recommendations to provide spaces adequate for the more generous number of offerings of World Language, Visual Arts, and Music programs** among SPS Middle Schools.

In addition, recommendations are made to **improve the Student Dining, Kitchens, and Serveries to better serve students within the lunch schedule constraints, and encourage greater student participation in Free and Reduced-Price Meal Programs.**

Demographic Variability: Some variability among SPS Middle Schools affects the number of students served, as well as the types and sizes of classes offered, and may drive other differences in how spaces and capital dollars should be allocated. These include:

- Enrollment varies significantly.
  - Five of the middle schools (Meany, McClure, Washington, Whitman, & Aki Kurose) have enrollment numbers below 800-900, which some middle school principals have identified as a threshold necessary to provide funding for an adequate number of exploratory classes.
  - Four of the middle schools (Eagle Staff, Denny, Madison, and Jane Addams) have enrollments in the "ideal" range of 800-1,000.
  - Three of the middle schools (Hamilton, Eckstein, and Mercer) are over capacity as of the 2019-20 school year.

  Some of these observations have been mitigated by the School Board's January 2021 revision to growth boundaries, which reduced Mercer's enrollment and increased that at Aki Kurose and Washington.
- The percentage of students served in bilingual education ranges from a low of 2 to 4% at five middle schools (Hamilton, Madison, Eckstein, McClure, and Whitman) to a high of 18-19% at Denny & Mercer and 25% at Aki Kurose. Bilingual education class sizes are often smaller, requiring additional classrooms to accommodate a 1,000-student enrollment capacity. For schools with higher percentages of bilingual education classes, additional classrooms may be considered.
- The percentage of students provided with Special Education services ranges from a low of 10% at Hamilton to a high of 20% at Denny, with our focus schools (Mercer, Aki Kurose & Washington) ranging from 12-15%. Special education class sizes are typically smaller, requiring additional classrooms to accommodate a 1,000-student enrollment capacity. For schools with higher percentages of special education classes, additional classrooms may be considered.
- And, importantly, some of the middle schools that are near the assumed 1,000-student enrollment capacity have class sizes that align with the expectation of 28 students in General Education and Science classrooms (Jane Addams, Hamilton), while other schools with higher needs, and grant funding to serve those needs, have class sizes, as well as classroom utilization rates, that are significantly smaller (Aki Kurose, Denny & Mercer). For the latter, additional classrooms may be considered.

Based on these findings, this Educational Specification includes a modified capacity model that increases the number of teaching stations and the allotted square footage to address differences observed for programs in lower equity tiers.

SPS Capital Planning may make a determination, based upon a review of a school's enrollment, capacity, equity tier, master schedule, quantities of grant funding sources and community partners, and other factors, as to whether a project qualifies for some or all of the additional spaces identified in the High Needs Capacity Model included in the Appendix.

[7] Study of the Nutrition Services Department for Seattle Public Schools, April 2016, Prismatic Services, Inc., p. 34.

SPS Middle School Comparison		From Feb 2020 P-223								Special Programs		Schedules from School Websites (Spring 2019)						2016 Nutrition Svcs Study		From CSIP's	Web-sites
Neighborhood MS	2019-20 Budget Equity Tier	Enrollment	Gender (not yet adjusted for non-binary)			Bilingual		Special Ed				Academic periods		Advisories			Lunches			Teams/PLC's	SBHC
		Feb 2020 count	M	% M	F	#	%	#	%	Int'l Pgm	Dual Lang Im	#	Duration	#	Duration	Focus (from CSIP)	#	Duration	F/R Lunch Partici-pation*	# F/R Elig Kids Not Fed	(Organization model when known)
Aki Kurose	1	677	346	51.1%	331	167	25%	103	15%			7	~51	1	31		3	30	65%		Yes	?
Denny	2	**854**	454	53.2%	399	157	18%	175	20%	Yes	Yes	7	50	1	22		3	30	69%	185	Yes, by discipline & grade level	Yes
Mercer	3	**1,159**	616	53.1%	543	218	19%	135	12%	Yes	Yes	7	50	None indicated			3	30	63%	274	Yes	Yes
Washington	3	616	325	52.8%	290	65	11%	78	13%			6	53	4	30	Learning mindset, Social/Emotional	2	30	75%	119	Yes, by discipline	No
Robert Eagle Staff	3	819	421	51.4%	398	61	7%	129	16%			6	53	4	30	Homeroom	2	30	N/A	N/A	Yes	Not yet
Eckstein	4	1,087	535	49.2%	520	47	4%	148	14%			6	53	4	30	Homeroom	2	30	56%	55	Yes	No?
Hamilton	4	**1,043**	543	52.1%	498	23	2%	102	10%	Yes		6	55	5	35, Wed 20	Climate & study skills	3	30	58%	33	Yes, by discipline?	Nurse
Jane Addams	4	**1,004**	536	53.4%	468	98	10%	147	15%			6	50, 1@63	4	32	Inclusion & cmty bldg	3	30	62%	89	Yes, 2X/mo	No?
Madison	4	986	507	51.4%	479	31	3%	132	13%			7	55, 1@50	Afr-Am males only?			3	30	65%	78	Yes	Yes
McClure	4	541	264	48.8%	276	22	4%	94	17%			6	5@55, 1@60	4	25		3	30	66%	31	Yes, by discipline	No
Meany	2	519	286	55.1%	229	31	6%	81	16%			Not on website		4	27	Social/ emotional			N/A	N/A	Yes	No
Whitman	4	638	324	50.8%	313	24	4%	107	17%			6	55	4	20	academic prep & C&CR	2	30	55%	110	Yes	No

SPS Middle School Comparison	COMPARISON OF TEACHING STATIONS REQUIRED BY REPRESENTATIVE MIDDLE SCHOOLS														COMMENTS
Neighborhood MS	NUMBER OF TEACHING STATIONS										Average Students/Teaching Station				Rationale for Master Schedule Analysis for Middle School Ed Spec Extrapolation
	Gen Ed (Math/ELA / SS)	Sci-ence	World Lang/ ELL	SpEd	Flex (@ Denny, Ldrshp)	CTE	Art	Music	PE/Fitness/Health	TOTAL	Global	Gen Ed + Sci	World Lang + ELL	SpEd	
Aki Kurose	22.4	4.6	0.5	7.33	1.5	1.33	1	1	1.33	**40.99**	**18.0**	**19.0**	**?**	**16.8**	Aki is shortchanged on Visual Arts (2 sections 1 semester), Music (only 6 sec's ea sem), World Language (only a few sections). Almost every class in their sched is "modified", so less certainty about Gen Ed/SpEd categories
Denny	32	5.67	3.81	8.33	1.5	1.17	1	3	2.17	**58.65**	**14.3**	**20**	**19**	**6.5**	Analyzed due to high Bilingual and SpEd, as well as enrollment closer to 1,000
Mercer	33	9.17	4.1	10	-	1	1	1	4	**63.27**	**18.2**	**24.9**	**22**	**8.2**	Target case study: Analyzed 2018-19 initially due to availability of data, then analyzed 2019-20 when that became available on 2/28.
Washington	13.8	4	1.4	4.4	1	0.8	1	2	2	**30.4**	**19.6**	**13.8**	:: Did not analyze ::		**This one is skewed by low enrollment.** WL is Span & Jap; Flex is ELL; CTE is Comp Tech; Music is .8 Band, .6 Orch, .6 Choir
Robert Eagle Staff	18.8	6	4	4.4	1	1.4	1.4	2	2	**41**	:: Did not analyze ::				Presence of Licton Springs K-8 skews analsis of space usage. WL: 3 Span, 1 Jap. Flex is ELL. Art incl .4 Theater; CTE: Tech Ed.
Eckstein	27	8	3	7	1	2	1.5	2.5	2	**54**	:: Did not analyze ::				Enrollment over target. Flex is ELL. Art is 1 classrm fully sched, 2nd 1/2time. Music is full band & orch, 1/2 choral. CTE both comp sci.
Hamilton	23.8	8	2.8	4.2	-	0	2	3	2	**45.8**	**22.9**	**26.5**	**25.1**	**10.3**	Analyzed due to enrollment approximating 1,000, low level of SpED, but International School program
Jane Addams	24	8	3.67	7	-	0	1	3.2	2	**48.87**	**20.4**	**28.1**	**25.6**	**7.5**	Analyzed due to enrollment right on 1,000, median level of SpED, and International School program
Madison	22	7	2	5.5	1	3	1	1.5	2.5	**45.5**	**19.9**	**22**	:: Did not analyze ::		WL is French, Span; Flex is ELL; CTE is Med Literacy, Comp Tech & Commun.; Music is Band + 1/2 Orch.
McClure	:: Did not analyze ::									**0**					*Enrollment too small to provide meaningful basis for extrapolation*
Meany	:: Did not analyze ::									**0**					*Enrollment too small to provide meaningful basis for extrapolation*
Whitman	:: Did not analyze ::									**0**					*Enrollment too small to provide meaningful basis for extrapolation*

Exemplary Schools for Young Adolescents

"Kids need teachers teaming around a cohort of students.
Kids need to belong, especially at this stage, or they become disenfranchised.
They are struggling with identity, so they need a stable structure where their identity is very clear."[1]
-Chief Academic Officer Diane DeBacker

According to a research summary on exemplary schools for young adolescents, "outlining the research describing the characteristics of exemplary schools for young adolescents requires drawing on four key frameworks for high-performing middle grades schools:

- "This We Believe: Successful Schools for Young Adolescents," published by the Association for Middle Level Education.
- Turning Points 2000: Educating Adolescents in the 21st Century.
- The National Forum to Accelerate Middle-Grades Reform's vision statement (and "Schools to Watch" Rubric)
- Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform[2]

References for each of the above frameworks can be found below.[3] [4] [5] [6]

The Educational Specification team compiled the characteristics and practices from the above sources outlining "Four Key Frameworks for High-Performing Middle Schools" in a side-by-side format for comparison (see Appendix).

While each of these sources frame their beliefs, vision, principles, and strategies in different ways, we find significant agreement among them in principles and practices that result in high-performing middle schools.

Upon review of these research findings in a middle school ed specs planning meeting, Chief Academic Officer Diane DeBacker confirmed that "these practices from research are what we would aspire to," and "my view is not different from what you've already found."[7]

We have also drawn out the facility implications that we can see from our decades of studying and working in school planning and design. These implications are included in the columns directly adjacent to the framework from which they are drawn. Commonalities among the implications are illustrated in the table on the next page. These facility implications will be integrated throughout the various sections of these Educational Specifications.

[1] Middle School Ed Specs Planning Meeting, April 22, 2019.
[2] Research Summary: Characteristics of Exemplary Schools for Young Adolescents; Andrews, P.G., Caskey, M.M. & Anfara, V.A.Jr., Curriculum and Instruction Faculty Publications, PDXScholar, 2007.
[3] This We Believe: Successful Schools for Young Adolescents, National Middle School Association, 2003 (now Association for Middle Level Education -- the updated 5th edition "The Successful Middle School: This We Believe (2021) was used for the research comparison table herein.)
[4] Turning Points 2000: Educating Adolescents in the 21st Century; Jackson, A.W., & Davis, G.A., 2000.
[5] Schools to Watch Rubric, The National Forum to Accelerate Middle-Grades Reform, 2018.
[6] Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform, National Association of Secondary School Principals, 2006.
[7] Middle School Ed Specs Planning Meeting, April 22, 2019.

Implications for Learning Settings	Turning Points 2000	NASSP: Breaking Ranks in the Middle	NFAMGR: "Schools to Watch" Rubric	AMLE: The Successful Middle School: This We Believe
Large schools should be divided into smaller learning communities, with teams of teachers & students as the underlying organizational structure.	✓		✓	
Settings should be organized to support small interdisciplinary teams of teachers working with a common group of students.			✓	✓
Places for teams of teachers to plan together.		✓	✓	✓
Settings that support active, inquiry-based & project-based learning (reconfigurable furnishings, breakout spaces, materials storage); a different mix of classrooms, labs and other flexible learning settings.	✓		✓	
Settings that support a variety of approaches beyond direct instruction	✓		✓	
A variety of smaller settings that support differentiated instruction, tutoring, mentoring, special adaptations, interventions, and other supports, and facilitate learning and working together in manageable size groups	✓		✓	✓
Welcoming, warm, daylit, transparent to foster a community of connections.	✓			✓
Places that encourage independent reading.				✓
A rich array of digital tools available wherever needed.				✓
Places that connect students to the environment and where stewardship can be taught.				✓
Interior & exterior settings that support movement & physical education, as well as meaningful inquiry through integration of core disciplines.				✓
Settings that support skill building and personal expression through music, art and exploration of interests that may lead to career paths.			✓	✓
Places for rotating (digital or analog) exhibits or displays about diverse cultures and customs				✓
Settings that support guidance…if advisories are used, then enough spaces that all can meet in appropriately sized groups		✓		✓
Spaces for service providers, as well as spaces conducive to confidential conversations				✓
One or more spaces that welcome families, to provide resources for them to understand young adolescents, and to comfortably meet with staff	✓	✓	✓	✓
Spaces that allow partners, where appropriate, to integrate their services & supports into the school	✓	✓	✓	✓

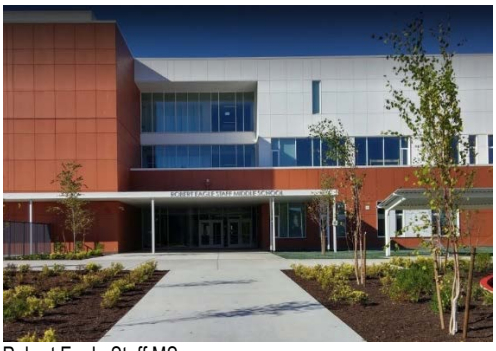
For specific comparison implications to learning settings relating to the four frameworks, see Appendix H.

Lessons Learned: Post-Occupancy Debriefs from Recent Middle Schools

"The most important thing is that there is sufficient flexibility of space so that as time goes on the building can adapt to whichever organizational structure is selected. Classroom groupings of four, five and six are flexible enough to accommodate either interdisciplinary teams or grade level teams."[1]
-Jeff Clark, Denny Middle School Principal

Capital Projects conducted post-occupancy debriefs with principals from each of the four SPS middle schools that have been modernized or replaced within the last decade. In all cases, the debriefs were conducted with the person who was both the planning principal for the project and the current administrator for the school.[2] These include:

- Robert Eagle Staff MS replacement (2017)
- Meany MS modernization (2017)
- Jane Addams MS modernization - multiple phases (2017)
- Denny MS replacement (2011)


Robert Eagle Staff MS


Meany MS


Jane Addams MS


Denny MS

The goals of the debriefs were to assess:

- How closely the facility aligns with the Middle School Ed Specs.
- Does the facility support the school's programs, and is it flexible to accommodate changes?
- Does the facility contribute to a safe and healthy school culture and climate?
- Does the facility accommodate best practices for high performing middle schools?

[1] Post-Occupancy Debrief for Denny Middle School, Jeff Clark, 9/29/20.
[2] Debriefs conducted 6/18/19 for Eagle Staff MS; 7/23/19 for Meany; 9/22/20 for Jane Addams; and 9/29/20 for Denny MS.

- How might future Middle School Ed Specs be enhanced so that buildings provide better support for programs?

Given the principals' limited time, some topics were not addressed by all.

Key findings are described below; recommendations based on the findings are also included.

1. Building organization:

a. Jane Addams MS and Meany MS are modernizations of traditional mid-twentieth century schools with classrooms organized along linear double-loaded corridors that extend from a "core" consisting of administration areas, the student dining area, and one or more large shared spaces such as the library or the gymnasium.
b. Denny MS and Robert Eagle Staff MS are new buildings that are organized as recommended by SPS' Generic Middle School Educational Specifications (2011). In these, classrooms and labs are organized in neighborhoods of five or six classrooms and labs clustered around an open "flex" or "shared learning" area that provides a resource for small group activities to be conducted outside of the classroom, while maintaining line-of-sight supervision from most of the classrooms within the neighborhood.

In both cases, the academic neighborhoods are aligned along hallways with direct sightlines their entire length; similarly, the neighborhoods of classrooms are also organized with direct sightlines down their entire length.

2. Program organization:

a. Jane Addams MS and Meany MS have classrooms organized either side of long linear hallways. Principals noted that their buildings get in the way of how they would prefer to organize their programs:
   - Jane Addams MS "to the best of our ability, tries to organize by interdisciplinary grade level teams rather than separating by departments. The building gets in the way of that organization, so we do a lot of workarounds." She further noted that "the district's assignment of programs such as the Highly Capable Cohort (HCC) program to certain schools like JAMS prevents the tight teaming opportunities that many other schools and districts across the nation have at the middle school level."
   - The Jane Addams principal noted that SPS Collective Bargaining Agreements have limited responsibility for supervision to Administrators (rather than extending to certificated staff as is done in many other districts.) So direct sightlines without hiding places are more critical than in many other schools.
   - Meany MS is currently organized by curriculum departments "because the building doesn't support organizing by grade levels, which would be strongly preferred." Further, science is located "where the sinks are," which is in a linear grouping of six classrooms/labs aligned on one side of a double-loaded corridor. The principal stated, "science should be distributed throughout the academic areas of the building so that they could be organized by interdisciplinary learning communities, and she would integrate the disciplines if the building would support it."
b. Denny MS and Robert Eagle Staff MS are new buildings that have tried different program organization models.
   - At Denny MS, they initially organized in interdisciplinary teams, which is a middle school research practice, but found that specialty programs such as SpEd, dual language, and others that serve students across teams, make that challenging. So now, each grade level generally occupies a single floor of classrooms, labs, and support spaces within their three-story building.
   - The Denny MS principal noted: "The most important thing is that there is sufficient flexibility of space so that as time goes on the building can adapt to whichever organizational structure is selected. Classroom groupings of 4, 5 and 6 are flexible enough to accommodate either interdisciplinary teams or grade level/subject matter teams."
   - At Robert Eagle Staff MS, they initially organized by grade level and content the first year but found they have too many classes with mixed grade levels to consistently organize by grade. The principal offered "often, it's more important to place a new teacher next to a veteran." The primary organization challenge at Robert Eagle Staff MS has been the Board-mandated sharing of the facility with Licton Springs K-8, which has eliminated several middle school resources such as shared learning areas, a science lab, an outdoor play area, and part of their playfield.
   - There was no complaint in either case about supervision of the classrooms and labs organized into academic neighborhoods.

RECOMMENDATIONS:

- Continue to organize general education classrooms and labs within academic neighborhoods of 4, 5 or 6 spaces, because they provide far better support for organizing in teams than do traditional schools organized with double-loaded corridors. They are also flexible enough to accommodate a variety of program organization approaches, while also serving the purpose of breaking down the scale of a large 1,000-student school into smaller groupings that are more readily navigated by students.
- Science labs should be distributed among the academic neighborhoods to enable interdisciplinary and/or grade-level teams.
- Hallways within the academic neighborhoods, as well as those connecting the neighborhoods, shall be aligned to provide direct sightlines their entire length to support administrators in their responsibility for student supervision.

3. Shared Learning Areas within the classroom neighborhoods:

a. Denny MS has six open "flex areas" that are over 600 square feet. The principal recommends retaining three of that size and subdividing the remaining three into an open area and an enclosed area for small groups. (It should be noted that Denny does not have small group collaboration spaces.)
b. Jane Addams MS and Meany MS buildings can provide shared learning areas distributed among the classrooms due to the rigid double-loaded corridor configuration of their existing buildings. Meany principal advised that her teachers would use flexible spaces within clusters of classrooms--it is really a training issue when teachers do not use them.
c. Robert Eagle Staff MS was planned to provide four open "shared learning" (Learning Commons) areas, and three Small Group Collaboration spaces. The Licton Springs program absorbed two of the larger and two of the smaller spaces, so the middle school's ability to use these spaces has been limited. The principal observed that the collaboration spaces that were located along the main hallway with no adjacency to a teaching station have not been very usable because middle school students are too distractable without adults nearby to provide a bit of passive supervision.

RECOMMENDATION:

- In addition to the open "shared learning" or Learning Commons spaces, it is a high priority to provide plenty of small, enclosed spaces for an adult to work one-on-one or with a small group of kids. Locate all spaces where adults are nearby and can provide passive supervision.

4. Administrators and Counselor locations:

a. Denny MS has satellite office suites on each floor for grade-specific staff; each has three offices that accommodate the grade-specific assistant principal and counselor, and then usually one additional staff or community partner. They feel that three office spaces within these suites are adequate because different schools have different staffing based on demographics. (Note: they also have a small suite dedicated to community partners, see below).
b. At Jane Addams MS, they have recently been forced by increased enrollment to move their assistant principal and counselors into a centralized office suite but would prefer to have their spaces distributed and in proximity to the grade level classrooms so that they can be more available to the students.
c. At Meany MS, their assistant principals have offices in the central administration wing because the small group of distributed offices in a different location has no student waiting area that would allow them to be located there. It would be preferred if there were office spaces distributed among the student learning communities so that administrators & counselors could be located there.

RECOMMENDATIONS:

- Provide satellite office suites with two offices for grade-level Asst' Principal and Counselor, and a third office/conference room that can be utilized for informal meetings or an additional office.
- Provide a small waiting/supervision area outside of each Assistant Principal's office, whether located in the central administration suite or the satellite (Distributed Admin) suites.
- Provide 4 additional offices (two single-occupant, and two double-occupant) distributed as needed outside the academic neighborhoods but near classrooms and labs.

5. Number of teaching stations:

a. Denny MS principal advised that: "Though the classroom spaces were planned around the 30:1 ratio for middle schools, there are many programs with smaller class sizes than that. This results in the school running out of space because they do not have enough teaching stations to accommodate all the smaller classes and groupings."

RECOMMENDATION:

- A review of master schedules confirmed schools in lower equity tiers, and/or with significant grant funding, need more teaching stations. Therefore, several additional half-size flex classrooms have been included in the General Education section for the High Needs Capacity Model included in the Appendix. A significant number of small group spaces have also been added at the Academic Neighborhoods and in the Library suite.

6. Advisories:

a. At Denny MS, all students participate in advisories 1-2 times per week in their full first-period class. The principal would not recommend changing the Ed Specs to accommodate advisories.
b. At Jane Addams MS, all staff are advisors, not just certificated staff. Ideally, they would have advisory groups of 13-15 students (as they are able to do during the current remote learning). The building limits them from having the ideal size because they do not have sufficient spaces for groups of 15. So, with in-person learning, they have groups of 30 with two adult advisors in each room.
c. Meany MS offers advisories 4 days per week for 24-minute periods during first period, with full-class size groups. Every teacher has an advisory unless their planning period conflicts with the advisory period. Counselors train staff in facilitating social/emotional learning discussions, and they use Yale's RULER approach to emotional literacy to focus advisories.
d. Robert Eagle Staff MS utilizes alternate ways of incorporating social/emotional learning into content areas, like anti-bullying information into Social Studies.

RECOMMENDATION:

- There is such variability among schools' use of Advisories, and only one of the four surveyed would use more 15-student spaces to accommodate advisories, so no changes are recommended for the size and number of spaces for Advisories.

7. Special Education spaces:

a. There is substantial diversity among the middle schools in the number of Special Education (SpEd) students served.
b. Denny MS utilizes 8 spaces for full-time SpEd programs. Also, they have 6 for part-time programs led by partners that are paid for thru central funds and linked to Racial Equity goals. Assuming the current level of partnerships, they recommend fourteen spaces, of which six are full-size classrooms, and the rest are half-size or smaller (assume 4 half-size and 4 smaller).
c. Jane Addams MS has 2 Distinct programs, 2 Moderate Intensive, 2 Social Emotional Learning (SEL) classrooms. They also divide classrooms in half to serve as break-out rooms for students who need small group instruction for a portion of the day. Their recommendation is six full-size classrooms and four smaller breakout areas for small group instruction or 1:1 work. The teachers using small group instruction spaces would need an office or conference room to have private conversations.
d. Meany MS is currently using a full-size classroom for Distinct, one for Moderate, a half-size classroom for Access, and three full-size Resource rooms. If they approach capacity, they would need more spaces dedicated for SpEd.
e. Eagle Staff MS has 1 full-sized classroom for Distinct, 2 half-sized classrooms for Access, 2 half-sized classrooms for Moderate Intensive, and 2 full-size Resource rooms.

RECOMMENDATION:

- District-wide Ed Spec: For the typical comprehensive middle school of 1,000 students, provide one full-size classroom for Intensive Services, one full-size for Moderate Intensive Services, as well as one full-size and two half-size classrooms for other level of service the school provides. Small group collaboration & MTSS breakout rooms already included in the Ed Spec can be utilized for small group instruction or 1:1 work.

- High Needs Capacity Model: see Appendix for special education spaces to be provided for this model.

8. Career & Technical Education spaces:

a. Denny MS has four labs for STEM combined with Science, and each pair shares a prep area. It would be better to have 6 labs so that each grade level has a pair of science labs. All science spaces should have a sink even if they are a classroom rather than a lab configuration. In addition, one dedicated CTE classroom is needed; and currently set up as a computer lab for now.

b. At Jane Addams MS, STEM is also combined with Science.
   - They do not have a dedicated CTE program because of insufficient funding; the limited number of teachers with CTE certification; the 6-period/day schedule that limits time for electives (1 of which is PE), and the push to offer World Language as a student's second elective. The principal recommended that CTE be embedded into all the courses rather than being a stand-alone course.
   - Having a makerspace is a great vision but the question is: "who will manage it?" It could be beneficial if there was one per grade level to support integrated team teaching; they could be smaller to fit 5-6 students working on individual projects.

c. Meany MS low enrollment does not allow them to fund a certified CTE teacher, so their dedicated space is currently vacant, though they have turned one classroom into a makerspace with a green screen. If they had sufficient funding for CTE, they would like to offer software application development, video game creation, and/or green screen videography.

d. Robert Eagle Staff MS is currently utilizing their larger CTE lab for a virtual reality class. The principal hesitates to recommend any specific CTE program, as the field is changing so quickly, but recommends that CTE spaces should be as universal and generic as possible, with plenty of storage and a sink.

RECOMMENDATION:

- Provide one dedicated CTE classroom/lab with plenty of storage and at least one sink, for the frequently offered program of computer programming/software application development/etc.; provide adequate power and data to support up to 32 mini-desktop units that fit behind full size monitors. In addition, provide one CTE classroom/lab to accommodate the CTE Department's initiative to offer a STEM Innovation Lab program across all middle schools. Both labs shall be configured the same size as a science lab, with a similarly sized prep area, to offer program flexibility.

9. Physical Education & Intramurals:

a. Denny MS:
   - Showers are not used for either physical education (PE) or after school sports, so there is no need to have shower facilities for either. However, there should be a shower facility within the building to support students experiencing homelessness or SpEd needs.
   - Student PE lockers are used for both PE and intramurals. They do not use the lockers for sports on weekends; they use the locker rooms and put their bags on the floor.

b. At Jane Addams MS, they have 2 or 3 showers in each PE locker room, but only because they were required by the Ed Spec (there may also be a Health Dept. requirement for sports.) They never see the showers used, but the lockers are used for clothing and shoes. They do not have lockers for intramurals, but it would be great to have them, so kids don't have to run their street clothes to their main lockers after changing.

c. Meany MS, the PE and athletics facilities are limited by their tight urban site, though they offer the same intramurals as the other middle schools. They utilize the adjacent Miller Playfield under the district's joint use agreement with Seattle Parks.

d. At Robert Eagle Staff MS, the principal shared that classrooms have worked fine for any of the clubs or after-school activities, and the new playfield has also been fine for outdoor activities. Two student showers were provided in each locker room. Only PE lockers were provided, as there were no athletics lockers in the MS Ed Specs; this has not caused an issue.

RECOMMENDATIONS:

- Lockers: Provide lockers within each locker room for intramural sports, so that even students experiencing

homelessness can participate in intramurals and have a place to store their uniforms.
- Showers: Continue to provide 2 or 3 showers per student locker room for long-term flexibility. Also provide a small separate shower room configured so it can be used as an all-gender shower for students, or a shower for adults.
- Provide a separate shower/changing room outside the PE locker areas for students experiencing homelessness.

10. Community: What makes a facility warm and welcoming:

a. Denny MS:
- Two main entry points where staff can greet students arriving from the buses as well as those who walk.
- More spaces that support community partnerships.
- More display space for student work and positive messages in hallways and classrooms.

b. Jane Addams MS:
- An open and welcoming main office that's visible from the main entry and isn't enclosed behind glass.
- Being able to see inside the classrooms.
- Having transparency into breakout spaces and and the ability to see students working (like the 'glass boxes' at Nathan Hale HS).
- Providing artwork throughout the school.
- Provide flexible seating for kids to sit in clusters and socialize.
- A space for families, including a computer & printer.
- Students would say: readily accessible charging stations for their electronics.

c. Meany MS:
- Spaces needed for community partners and family support workers:
  - Community Partners: They have two partners and a full time SBIRT provider, so 3 small offices for those.
  - Family Support: Two small offices (80 sf) each of which can accommodate 2 people, and 2-3 itinerant workstations in a third space.
- A Family Resource room where a family could sit comfortably and meet with their family support worker. Even better if it is near the family support offices.
- It would be better if the spaces they use to support families in need (McKinney-Vento) had more privacy to avoid stigma.

11. Community: How does the facility build a sense of community identity and belonging?

a. Jane Addams MS:
- Include students in the design process.
- Middle schoolers are growing up but still need to play, so provide play features such as big rocks and covered basketball courts.
- Recognize the history of the land and consider how the building can honor that through art and design.

b. Robert Eagle Staff MS: The openness in particular helps with that. In addition, the visibility of the library from virtually everywhere, both inside and out, orients our identity around the idea of the central learning commons.

12. Culture: How does the building promote good behavior and positive social skill development, while discouraging undesirable behaviors?

a. At Meany MS, the existing building has too many jogs in the hallways, making it challenging, as there are places where students cannot be directly observed.

b. At Robert Eagle Staff MS, the daylight and transparency help promote positive behavior.

13. Culture: How does the building support, or detract from, your efforts to promote educational justice?

a. Denny MS:
- We need more spaces to support the community partnerships - more mini classrooms and small office spaces.
- Currently there are 20 partners. There are 7 spaces that full time partners use. These would include:
  - Food pantry & clothing storage.
  - Small group and/or office spaces: a suite of 4 unassigned office/meeting rooms is recommended, located near the Attendance office for proximity to check-in.

- A couple of office/small group spaces integrated into the grade-level satellite admin/counseling suites.
- A parent room is also recommended.

b. Jane Addams MS:
   - Clustering all the administrative staff in the main office creates a stigma for going there. Place many of these out in the student areas where they are easily accessible.
   - Provide a family space with a computer and printer available so families can fill out their forms on site.
   - Distribute classroom spaces for SpEd and English Language Learners (ELL) throughout the school, not just in standalone groupings.

RECOMMENDATION:

- Provide additional spaces for community partners, McKinney-Vento programs, and family support spaces per the section "What Do We Do: Building School-Community Connections."

14. Student Dining/Commons:

a. Denny MS: They have a large open central "galleria" that is divided so that middle school uses one end and Chief Sealth HS uses the other.
b. Jane Addams MS: This should be the best space in the school, so everyone wants to be there. This will help create an inclusive environment where the dining room is not only for the students who need free-and-reduced price meals.
c. Meany MS: They only have one serving line due to small enrollment; but ensuring there is enough capacity to serve food quickly is important. For performances or assemblies, their space only seats 250-300 using the convertible dining tables, so they have events in the gym using the 300-seat bleachers and about 300 6th graders sitting on the floor, because setting up chairs at the end of the day after PE is too difficult.
d. Robert Eagle Staff MS:
   - Supervision sightlines are great; even with the separate alcoves for students who need to be a bit removed from the fray.
   - The design of the balcony overlooking the commons is brilliant, as it allows those students who can get sensory overload to be present, while a bit removed, for assemblies and performances.
   - The openness of the commons to the main hallway is challenging due to distractions during a performance.

RECOMMENDATION:

- Make the student dining/commons the best, most student-attractive space in the school, so that students who are eligible for free-and-reduced priced meals will not feel stigma in participating in school meals.

15. Safety & Security: How does the building help or hinder these?

a. Meany MS: They have a secure vestibule as well as two additional secured entries they keep locked after arrival, so they feel it is secure even though they are in a very urban neighborhood.
b. Robert Eagle Staff MS: The secure vestibule is key. The lockdown system works well. While there are a lot of external doors, we can see easily who is in the building, and there are no blind corners. However, the Attendance office needs direct adjacency to the vestibule, and there should be a gate to limit access beyond the Admin reception counter.

16. Student Lockers:

a. Denny MS: Has enough half size lockers for all students, but they do not use all of them. Various size music lockers are also needed.
b. Jane Addams MS: Currently all 800 lockers are being used; some are shared, but post-pandemic this will not be the case.
c. Robert Eagle Staff MS: They have enough lockers to provide one for every student, but only about 60% of them are used. Provide pad locks and not combination locks that require higher level of fine motor skills.

RECOMMENDATION:

- Provide a mix of half-size and smaller general-purpose lockers; some musical instrument lockers of varying sizes near the performing arts classrooms; as well as those specified for students experiencing homelessness.

17. Restrooms:

a. Jane Addams:
   - There should be a mix of both gender and all-gender restrooms, as there are family cultures that require gender separation.
   - In the restrooms, 2-3 stalls are preferred. The door height above the floor should allow for supervision/counting feet. The school currently uses vertical privacy strips to cover the gaps between doors and partitions in the stalls.

18. Flexibility:

a. At Denny MS, the classrooms have been subdivided to accommodate smaller classes, but this does not work well with the HVAC system, so prioritize more smaller or divisible spaces for classrooms.
b. At Jane Addams MS, the teen health center has not been funded, so it is being used by counseling staff.
c. At Meany MS, low enrollment has allowed more flexibility. They have been able to provide space for the McKinney-Vento program needs and a green-screen makerspace. As the building reaches capacity, flexibility will be lost as it is organized with classrooms on either side of narrow double-loaded corridors with no breakout spaces. The library is substantially undersized and has no conference rooms.
d. At Robert Eagle Staff MS, flexibility was limited while the Licton Springs K-8 program was housed there for the initial three years after opening. Additional portables were needed and were located on the outdoor basketball courts.

19. Best aspect(s) of new/modernized facility:

a. Denny MS:
   - Indoor circulation rather than outdoor "California style" campus they had previously.
   - Large relites to allow for supervision in the stairwells (even though they are fire rated.)
b. Meany MS: Everything is on one level, although the principal also liked the multi-story configuration at Denny when she was an Assistant Principal there.
c. Robert Eagle Staff MS:
   - The library is best -- the location is visible from everywhere and signals that learning is at the center.
   - Skylights at the commons.
   - Direct "back door" from the admin wing to the play area allows easy access for outdoor supervision.

20. What improvements should be noted for the next Ed Specs?

a. Denny MS:
   - Entryway and hallway widths are too small for the number of students circulating.
   - Provide an all-weather outdoor space with sports turf.
b. Meany MS:
   - Limited alignment of the circulation hallways.
   - They have no event parking due to the tight urban site.
c. Robert Eagle Staff MS:
   - Musical instrument storage: provide storage for the specific list of instruments typically provided for middle schools.
   - Music practice rooms are directly connected to the performing arts classrooms, but they have been trashed as they cannot be supervised by administrators.

RECOMMENDATIONS:

- Music instrument storage has been identified based upon an updated middle school instrument list.
- Music practice rooms shall be located near performing arts classrooms, but also adjacent to a hallway that can be visible by administrators.
- Increase the "grossing factor" on net assignable areas to provide adequate circulation in entryways, hallways, and stairwells, so that students can get to classes in the short 5-minute passing periods allowed by middle school schedules.
- As noted above in #2 Program Organization, provide hallways with direct sightlines and without hiding places.
- Provide an all-weather outdoor space with sports turf, and a covered basketball play court.

Curriculum and Pedagogy Overview

Seattle Public Schools is committed to **ensuring high expectations and high-quality schools for every student.**[1]

Academic Subject Areas and Standards

Educational excellence and equity for every student is goal one of our district's Strategic Plan. Our academic program is grounded in standards-based curriculum, with strong, targeted instruction delivered by highly qualified teachers to ensure that every student graduates ready for college, career, and life.

English Language Arts

The English Language Arts Scope and Sequence for Grades 6-12, designed by SPS language arts educators in 2014, provides an overall learning map for teachers. Based on Common Core standards for reading, writing, speaking, and listening, the scope and sequence guides teachers on which standards to emphasize and suggests effective units of study.[2]

According to a summary of the standards for English Language Arts & Literacy, "The Common Core asks students to read stories and literature, as well as more complex texts that provide facts and background knowledge in areas such as science and social studies. Students will be challenged and asked questions that push them to refer to what they have read. This stresses critical thinking, problem-solving, and analytical skills that are required for success in college, career, and life."[3]

Mathematics[4]

The Seattle Public Schools Mathematics Scope and Sequence, designed by our math educators in 2015, provides an overall learning map for teachers. Based on Common Core math standards, the scope and sequence guides teachers on which standards to emphasize and suggests effective units of study.

Mathematics Program Goals in Seattle Public Schools

To be well-informed adults and to have access to desirable jobs, students require a mathematics education that goes beyond what was needed by students in the past. All students must develop, deepen, and sharpen their skills, their understanding of mathematical concepts and processes, their abilities in problem-solving, reasoning, and communication abilities and hone their ability to make sense of and to solve compelling and complex problems. For this to occur, rigorous mathematical content must be organized, taught, and assessed in a problem-solving environment. Students' mathematical knowledge must be connected to the ideas and skills found in all grade levels, as well as to real life situations outside the classroom.

The goal is to equip each student with the ability to meet the mathematical demands presented by college and careers, and to carry their mathematical thinking and problem-solving into multiple learning situations.

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[1] This statement and the following introductory paragraph for Academic Subject Areas are excerpted and adapted from SPS website on Academics > Curriculum, accessed January 2021.
[2] Excerpted from SPS website Academics > Curriculum > Language Arts, accessed January 2021.
[3] Common Core State Standards Initiative website, English Language Arts Standards, accessed January 2021.
[4] This section provided by Anna Box, Math Program Manager, Seattle Public Schools, 2/19/16.

Science[5]

Seattle Public Schools' Science curriculum is based on the Next Generation Science Standards (NGSS) that were adopted by Washington State in 2013. The curricula based on these standards represent a shift in pedagogy towards three-dimensional learning described in the NGSS. Historically, science teaching has been focused primarily on content, but NGSS recognizes that 21st century skills involve a deep understanding of Science and Engineering Practices, Disciplinary Core Ideas (content), and Crosscutting Concepts that apply to all scientific disciplines. This shift in practice moves towards a pedagogy that focuses on "figuring out instead of telling about," which is a significant shift for even the most experienced teachers.

To do this, units are centered around puzzling scientific phenomena that are relevant to students' lives. Students are then led through a series of activities that help them understand the science around the phenomenon.

Further information on Science may be found in the sections entitled "What Do We Know: Adoption of NextGen Science Standards," as well as "What Do We Do: Science and Health Education."

Social Studies[6]

According to OSPI, social studies in Washington State contribute to developing responsible citizens in a culturally diverse, democratic society within an interdependent world. Social studies equip learners to make sound judgments and take appropriate actions that will contribute to sustainable development of human society and the physical environment.

Social studies comprise the study of relationships among people, and between people and the environment. Social studies recognize the challenges and benefits of living in a diverse cultural and ideological society. The resulting interactions are contextualized in space and time and have social, political, economic, and geographical dimensions.

Based on appropriate investigations and reflections within social studies, students develop distinctive skills and a critical awareness of the human condition and emerging spatial patterns and the processes and events that shape them.

Social Studies in Seattle Public Schools[7]

Social Studies skills are used to build new understanding and utilize background knowledge to construct meaning and share complex ideas in the four areas of History, Economics, Geography, and Civics.

Seattle Public Schools students engage in authentic intellectual work by researching events from multiple perspectives, analyzing their findings, and developing responses to questions in the context of History, Economics, Geography, and Civics. Students use reading, writing, and communication skills to create papers or presentations that show their ability to think critically and struggle with complex ideas.

Visual and Performing Arts

The Creative Advantage is Seattle Public Schools' K-12 arts plan, with the vision of ensuring every student at every school can learn through the arts, every year. To realize this vision, the Creative Advantage is a public-private partnership that includes Seattle Public Schools, the Seattle Office of Arts and Culture, and The Seattle Foundation. Further information on the Creative Advantage may be found in the sections entitled "What Do We Know: Elevating and Integrating the Arts," as well as "What Do We Do: Visual and Performing Arts."

Physical Education & Health

Seattle Public Schools offers a quality Physical Education program that builds knowledge, fitness, movement skills, social well-being, and confidence so all students can enjoy a healthy active lifestyle. The Physical Education and Health Literacy program provides all teachers with a detailed PreK-12 Curriculum Guide aligned to standards and best practices. Further information on the

[5] This section excerpted and adapted from the SPS website Academics > Curriculum > Science > Science Curriculum, accessed January 2021.
[6] This section excepted from OSPI Social Studies Curriculum, http://www.k12.wa.us/CurriculumInstruct/SocStudies/default.aspx, Nov 2015.
[7] This section excerpted and adapted from SPS website Academics > Curriculum > Social Studies Curriculum, accessed January 2021.

trends in Physical Education as well as detailed standards may be found in the sections entitled "What Do We Know: Moving Toward Lifelong Fitness" and "What Do We Do: Physical Education & Athletics."

Career & Technical Education

Seattle Public Schools offers a wide range of programs that provide students with a head start on college and careers in high-skill, high-wage, and high-demand occupations, and which are coordinated by the Career & Technical Education (CTE) Department. Further information may be found in the section entitled "What Do We Do: Career and Technical Education."

World Language

The district offers a variety of world languages at the middle school level, including Chinese, French, Japanese and Spanish, though individual schools may offer only one or two of these options.

Recent Curriculum Adoptions

The goal of the adoption process is to select the best instructional materials available that are aligned to the Washington State Standards and college and career readiness expectations. Additionally, the district's commitment to cultural relevance and accessibility for teaching Special Education, English Language Learner or Advanced Learning students guides and informs the selections.

Adoptions of middle school materials that have occurred since the 2012 Middle School Educational Specifications include:

- **2015 Social Studies**: Texts were chosen because they offer more supports for younger students, and they offer more rigor for seventh and eighth grade students, while teaching them how to look for issues such as bias. Texts were adopted for the following:
  - Sixth-grade World History
  - Seventh-grade World History
  - Eighth-grade US History
- **2018 Middle School Math**: enVisionmath2.0 emphasizes conceptual understanding and procedural skills. Problem-based learning provides opportunities to think mathematically, communicate with peers, and apply knowledge and skills. Lessons include visual learning instructions and animations. Personalized practice and differentiation resources provide teachers with maximum flexibility.[8]
- **2019 K-12 Science**: The adoption of the AmplifyScience curriculum provides instructional materials that promote modern teaching practices and align with the Next Generation Science Standards adopted by the State of Washington. Amplify blends hands-on investigations, literacy activities, and interactive digital tools to allow students to think, read, write, and support claims from evidence like real scientists and engineers. Students are more engaged with digital learning tools, such as modeling tools and simulations, than was the case with earlier curriculum materials.[9]
- **2019 Since Time Immemorial**: Due to a long history of institutional racism in education, the story of the original peoples of Washington State has been consistently omitted from the overall curriculum. This adoption provides all SPS students with the background history and current state of affairs of the 29 sovereign nations within the boundaries of Washington State. These materials will be considered by district staff to be "extended" core instructional material for the social studies curriculum.[10]
- **2019 Spanish Adoption for Grades 6-12**:
  - Newly adopted instructional materials are anticipated to increase student proficiency development in Spanish, enhance student engagement, and provide resources for differentiation.[11]

[8] enVisionmath2.0 overview, Savvas Learning Company website, January 2021.
[9] SPS website Academics > Curriculum > Alignment and Adoption > Curriculum Adoption > 2019 K-12 Science > 6-8 Science, accessed January 2021.
[10] Adapted from the 5/22/19 School Board Action Report adopting the Since Time Immemorial Curriculum, p. 4.
[11] Board Action Report for Adoption of Spanish Instructional Materials, September 11, 2019, p. 7.

- Of special note: A classroom set of textbooks for each level that a teacher teaches has been deemed to be sufficient, as teachers are not likely to use any student textbooks on a regular basis, and neither teachers nor students think it is necessary to provide individual copies of student textbooks to each student.[12]

Educational Specifications implications of the above adoptions include:

- Increased emphasis on collaborative learning requires that classrooms and furnishings accommodate small group activities.
- Increased use of digital learning tools such as visual learning instructions, animations, modeling, and simulations allow students to lead their own learning, with teachers as "the guide on the side" rather than "the sage on the stage."
- Classroom sets of textbooks in lieu of individual textbooks for each student will require adequate casework or shelving within the classrooms, but less need for student lockers.

Pedagogy

Danielson's Framework for Teaching Rubrics, integrated with Washington State Criteria for Student Growth, establishes clear expectations for teaching practice, and is utilized to evaluate teacher performance within Seattle Public Schools.[13]

We have shown all the Criteria below to demonstrate the full range of expectations but have selected and highlighted in the table below those descriptions of practice that have implications for the design of the physical environment. The full framework can be found in the SPS – Seattle Education Association Collective Bargaining Agreement.

For example, if learning activities are differentiated appropriately for individual learners, breakout groups can be accommodated in spaces that are visually connected, but acoustically separated from the classroom where large-group instruction occurs.

If the arrangement of the physical space is appropriate to the learning activities, and students should contribute to the adaptation of those spaces, then spaces should be flexible and adaptable, and furnishings should be mobile.

This framework supports key design principles of providing a variety of spaces to support varied learning activities and accommodating flexibility and adaptability within the design of facilities.

Danielson's Framework for Teaching Rubrics for Washington State Criteria Version 1.1

ELEMENTS	LEVEL 4 "DISTINGUISHED" PRACTICE
Criterion 1: Centering Instruction on high expectations for student achievement	
Criterion 2: Demonstrating effective teaching practices	
Criterion 3: Recognizing individual student learning needs and developing strategies to address those needs	
Criterion 4: Providing clear and intentional focus on subject matter content and curriculum	
1e: Designing Coherent Instruction	▪ Plans represent the coordination of in-depth content knowledge, understanding of different students' needs, and available resources (including technology), resulting in a series of learning activities designed to engage students in high level cognitive activity. ▪ Learning activities are differentiated appropriately for individual learners. ▪ Instructional groups are varied appropriately with some opportunity for student choice.

[12] Ibid, p. 3.
[13] Collective Bargaining Agreement between Seattle Public Schools and Seattle Education Association, Certificated Non-Supervisory Employees, 2019-22, Appendix H; the table included herein is adapted from the rubric to reflect only the highest level "Distinguished" practice.

	▪ The lesson's or unit's structure is clear and allows for different pathways according to diverse student needs.
Criterion 5: Fostering and managing a safe, positive learning environment.	
2e: Organizing Physical Space	▪ The classroom is safe, and learning is accessible to all students, including those with special needs. ▪ Teacher makes effective use of physical resources, including computer technology. ▪ The teacher ensures that the physical arrangement is appropriate to the learning activities. ▪ Students contribute to the use or adaptation of the physical environment to advance learning.
Criterion 6: Using multiple student data elements to modify instruction and improve student learning	
Criterion 7: Communicating and collaborating with parents and the school community	
Criterion 8: Exhibiting collaborative and collegial practices focused on improving instructional practice and student learning	

A Multi-Tiered System of Support[14]

A Multi-Tiered System of Support (MTSS) encompasses both the academic and social-emotional-behavioral demands of learning.

Seattle Public Schools has made a shift in practice to emphasize integration of both academics and behavior as critical to student success. MTSS emphasizes the system of support, rather than interventions.

MTSS is a key element of the Strategic Plan "Seattle Excellence" to support all learners and ensure equitable access to a robust, high quality education. MTSS provides a structure to address individual needs to maximize learning potential.

The SPS MTSS communicates the belief that for a child to reach to his or her highest potential, the needs of the whole child must be considered. The four domains encompass academic, social, emotional, and behavioral needs.

In addressing the needs of the whole child with intention, a child then has the greatest opportunity to learn, grow and achieve.

The design of the Seattle Public Schools Whole Child Framework provides the entire learning community with a clear understanding of overarching outcomes across the four components of MTSS:

- Leadership in MTSS
- School Culture, Collaboration and Communication
- Core and Tiered Instructional Supports
- Data, Assessment, and Progress Monitoring

The Seattle Schools Whole Child Framework communicates and demonstrates practices across the school system that ensure all are united in serving all students.

Continuum of Supports[15]

Instruction, enrichment, and intervention are delivered along a continuum to meet the full spectrum of social, emotional, behavioral, and academic needs of all students. In MTSS, tiers describe the intensity of support provided and do not define students.

[14] This section excerpted from the SPS website > Departments > Schools and Continuous Improvement > Multi-Tiered System of Support, accessed February 2021.
[15] This section excerpted from the OSPI website www.k12.wa.us > Student Success > Support Programs > Multi-Tiered System of Supports, accessed February 2021.

Tier 1 is the foundation for additional layers of support and should meet the needs of approximately 80% of the student population. Every student has equitable access to universal instruction and supports are:

- Research based and aligned to grade-level standards;
- Culturally and linguistically responsive;
- Universally designed; and
- Differentiated to meet their unique needs.

When more than 20% of students need additional support, leadership teams should re-examine the Tier 1 supports in place, as it is an indication that Tier 1 instruction and supports may be insufficient. Targeted enrichment and interventions are added to accelerate learning and to remove barriers that prevent students from benefiting fully from universal instruction and supports.

Tier 2 supports are an additional layer of targeted, evidence-based intervention programs that include:

- Regular progress monitoring to assess response to intervention;
- Explicit instruction with increased opportunities to practice and receive specific, frequent feedback;
- Gradual release of control and support when students master skills; and
- Increased communication with families to ensure consistency of support in school and at home.

Tier 3 supports are an additional layer of intensive, evidence-based intervention programs that have been individualized to meet the needs of students who demonstrate significant risk or do not respond to Tier 2 interventions. Interventions may be intensified across seven domains:

- Strength of the intervention program;
- Dosage of support;
- Alignment to target skills and standards;
- Attention to transfer;
- Comprehensiveness;
- Behavioral support; and
- Data-based individualization.

Spaces to Accommodate the Continuum of Supports

Tier 1 "Universal Instruction" activities occur in the typical classroom setting, or if the teacher chooses, some students can work with or without an adult in an area directly adjacent to the classroom as long as visual supervision can be maintained.

Approximately 20% of the students in any classroom would need additional tier 2 or tier 3 supports.[16]

Tier 2 instruction does not constitute automatic pullout to another space but is often necessary to ensure higher levels of student engagement and access to more direct (vocal, visual) supports. Tier 2 instruction can be offered at a table at the back of a classroom, however often teams of teachers will coordinate with tutors or interventionists. In those cases, alternate smaller spaces that offer some level of privacy (vs. a hallway) are optimal.

Tier 2 services could be a group of any size but is typically 6 or more. If 2 or more teachers coordinate in their planning and support, a small group of up to 10 to 12 middle school students could be facilitated.

Tier 3 instruction: Students receive tier 3 services only after first receiving tier 2 services. For example: within a class of 32 students, 25%, or 8 students may be in need of tier 2 supports, which may or may not mean leaving the classroom and meeting with another adult. Within those 8 students, perhaps 1 or 2 will also need more intensive tier 3 supports, such as 20 minutes with a tutor or community-based organization, or 30 minutes to retake a test or meet with a counselor. Tier 3 supports, then, would not occur at the same time as Tier 2 for these children, as they will need to experience all tiers.[17]

[16] Kari Hanson, SPS Director of Continuous Improvement specializing in the design and development of Multi-tiered Systems of Support, email communication, Feb. 22, 2021.

[17] Kari Hanson, SPS Director of Continuous Improvement specializing in the design and development of Multi-tiered Systems of Support, email communication, Feb. 22, 2021.

Tier 3 services would include activities like tutoring, conferring, or individual testing, with a supporting adult in separate settings for very small groups such as 1:1 or 1:2 or 1:3.

Ideally, there would be an alternative space for each pair of 32-student classrooms.[18]

Recommendations to support MTSS:

- Provide approximately one "breakout" space for each pair of General Education classrooms and labs, estimated as follows:

General Education Classrooms:	24
Science Classrooms	6
World Language Classrooms	3
TOTAL General Education Classrooms to be served:	**33**
Alternative "Breakout" Spaces	
Neighborhood Learning Commons (2 small groups or 1 medium group)	6
Small Group Collaboration Rooms (Tier 2 services - up to 8 people)	7
MTSS Breakout Rooms (Tier 3 services - up to 4 people)	4
TOTAL Alternative "Breakout" Spaces Proposed:	**17**

- Design the Neighborhood Learning Commons to provide for up to two groups of ~6 students to meet with an adult for Tier 2 services, with a 4' x 4' wall-mounted whiteboard for each group so that students can demonstrate their work.
- Provide a total of 7 small group collaboration rooms to accommodate groups of up to 8 students, distributed for ready access among the classrooms and labs, with a 4' x 8' wall-mounted whiteboard so that students can demonstrate their work.
- Provide a total of 4 MTSS Breakout Rooms to accommodate groups of up to 4 students, distributed for ready access among the classrooms and labs, with a 4' x 4' wall-mounted whiteboard so that students can demonstrate their work.

[18] Kari Hanson, email communication, Feb. 23, 2021.

State Learning Standards

Basic education in Washington State is defined by the Legislature as "an evolving program of instruction that is intended to provide students with the opportunity to become responsible and respectful global citizens, to contribute to their economic well-being and that of their families and communities, to explore and understand different perspectives, and to enjoy productive and satisfying lives. Additionally, the state of Washington intends to provide for a public school system that can evolve and adapt to better focus on strengthening the educational achievement of all students, which includes high expectations for all students and gives all students the opportunity to achieve personal and academic success.[1]

Washington State Learning Standards

Four learning goals provide the foundation for the development of all academic learning standards in Washington state:[2]

- Read with comprehension, write effectively, and communicate successfully in a variety of ways and settings and with a variety of audiences.
- Know and apply the core concepts and principles of mathematics; social, physical, and life sciences; civics and history, including different cultures and participation in representative government; geography; arts; and health and fitness.
- Think analytically, logically, and creatively, and to integrate technology literacy and fluency as well as different experiences and knowledge to form reasoned judgments and solve problems; and
- Understand the importance of work and finance and how performance, effort, and decisions directly affect future career and educational opportunities.

Current Learning Standards and Year of Adoption

- The Arts (2017)
- Computer Science (2018)
- Educational Technology (2018)
- English Language Arts (Common Core State Standards) (2011)
- English Language Proficiency (2013)
- Environment and Sustainability (2009)
- Financial Education (2016)
- Health and Physical Education (2016)
- Mathematics (Common Core State Standards) (2011)
- Science (2013)
- Social Studies (2018)
- World Languages (2015)

Comparable learning expectations for all students promote equity in education and work toward ensuring that all students are prepared to succeed in college and the workforce. As a public school district, Seattle Public Schools is required to teach the adopted state standards.

Links to each of the standards can be found on OSPI's website[3].

[1] RCW 28A.150.210.
[2] Washington State K-12 Learning Standards, OSPI website found at www.k12.wa.us/student-success/learning-standards-instructional-materials, February 2021.
[3] www.k12.wa.us/student-success/learning-standards-instructional-materials.

Adoption of NextGen Science Standards

Washington State formally adopted the Next Generation Science Standards in October of 2013. In our state, they are now called the Washington State Science and Learning Standards,[1] and they describe what students should know and be able to do at each grade level.

Next Generation Science Standards[2,3]

The Next Generation Science Standards (NGSS) are distinct from prior science standards in three essential ways.

Performance.
Prior standards documents listed what students should "know" or "understand." These ideas needed to be translated into performances that could be assessed to determine whether or not students met the standard. Different interpretations sometimes resulted in assessments that were not aligned with curriculum and instruction. The NGSS has avoided this difficulty by developing performance expectations that state what students should be able to do in order to demonstrate that they have met the standard, thus providing the same clear and specific targets for curriculum, instruction, and assessment.

Foundations.
Each performance expectation incorporates all three dimensions from the Framework— a science or engineering practice, a core disciplinary idea, and a crosscutting concept.

Coherence.
Each set of performance expectations lists connections to other ideas within the disciplines of science and engineering, and with Common Core State Standards in Mathematics and English Language Arts.

Conceptual Shifts in the Next Generation Science Standards[4]

The Next Generation Science Standards (NGSS) provide an important opportunity to improve not only science education but also student achievement. The following conceptual shifts in the NGSS demonstrate what is new and different:

1. **K-12 Science Education Should Reflect the Interconnected Nature of Science as it is Practiced and Experienced in the Real World.**

   The vision represented in the Framework is new in that students must be engaged at the nexus of the three dimensions:

   - Science and Engineering Practices,
   - Crosscutting Concepts, and
   - Disciplinary Core Ideas.

[1] OSPI website http://www.12k.wa.us/student-success/resources-subject-area/science/science-k-12-learning-standards/washington-state-science-and-learning-standards, October 2020.
[2] "Next Generation Science Standards" and "NGSS" are registered trademarks of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of this document, and do not endorse it.
[3] This section excerpted from NGSS Release "How to Read the Next Generation Science Standards", April 2013, p. 1.
[4] Excerpted from NGSS Release "Appendix A – Conceptual Shifts in the Next Generation Science Standards", April 2013.

Currently, most state and district standards express these dimensions as separate entities, leading to their separation in both instruction and assessment. But student performance expectations have to include a student's ability to apply a practice to content knowledge. Performance expectations thereby focus on understanding and application.

2. **The Next Generation Science Standards are student performance expectations – NOT curriculum.**

   Performance expectations simply clarify the expectations of what students will know and be able to do by the end of the grade or grade band.

3. **The Science Concepts in the NGSS Build Coherently from K–12.**

   The focus on a few Disciplinary Core Ideas is a key aspect of a coherent science education. The Framework identified a basic set of core ideas that are meant to be understood by the time a student completes high school. There are two key points that are important to understand. First, focus and coherence must be a priority. What this means is that the same ideas or details are not covered each year. Rather, a progression of knowledge occurs from grade band to grade band that gives students the opportunity to learn more complex material, leading to an overall understanding of science by the end of high school. Second, the progressions in the NGSS automatically assume that previous material has been learned by the student.

4. **The NGSS Focus on Deeper Understanding of Content as well as Application of Content.**

   The Framework identified a smaller set of Disciplinary Core Ideas that students should know by the time they graduate from high school, and the NGSS are written to focus on the core ideas—not necessarily the facts that are associated with them.

5. **Science and Engineering are Integrated in the NGSS, from K–12.**

   A significant difference in the NGSS is the integration of engineering and technology into the structure of science education. This integration is achieved by raising engineering design to the same level as scientific inquiry in classroom instruction and by giving core ideas of engineering and technology the same status as those in other major science disciplines.

6. **The NGSS are designed to prepare students for college, career, and citizenship.**

   All students no matter what their future education and career path must have a solid K–12 science education in order to be prepared for college, careers, and citizenship.

7. **The NGSS and Common Core State Standards (English Language Arts and Mathematics) are Aligned.**

   The NGSS are aligned with the CCSS to ensure a symbiotic pace of learning in all content areas. The three sets of standards overlap in meaningful and substantive ways.

Science and Engineering Practice in the NGSS[5]

In the future, science assessments will not assess students' understanding of core ideas separately from their abilities to use the practices of science and engineering. They will be assessed together, showing students not only "know" science concepts; but also, students can use their understanding to investigate the natural world through the practices of science inquiry, or solve meaningful problems through the practice of engineering design. The Framework uses the term "practices," rather than "science processes" or "inquiry" skills for a specific reason to emphasize that engaging in scientific investigation requires not only skill but also knowledge that is specific to each practice.

The eight practices of science and engineering that the Framework identifies as essential for all students to learn are listed below:

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking

[5] Excerpted from NGSS Release "Appendix F – Science and Engineering Practices in the NGSS", April 2013.

- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

NGSS - The Three Dimensions of the Framework[6]

The Framework describes a vision of what it means to be proficient in science; it rests on a view of science as both a body of knowledge and an evidence-based, model and theory building enterprise that continually extends, refines, and revises knowledge. It presents three dimensions that will be combined to form each standard:

1) Scientific and Engineering Practices
    a) Asking questions (for science) and defining problems (for engineering)
    b) Developing and using models
    c) Planning and carrying out investigations
    d) Analyzing and interpreting data
    e) Using mathematics and computational thinking
    f) Construction explanations (for science) and designing solutions (for engineering)
    g) Engaging in argument from evidence
    h) Obtaining, evaluating, and communicating information

2) Crosscutting Concepts
    a) Patterns
    b) Cause and effect: Mechanism and explanation
    c) Scale, proportion, and quantity
    d) Systems and system models
    e) Energy and matter: flows, cycles, and conservation
    f) Structure and function
    g) Stability and change

3) Crosscutting Concepts

    Physical Sciences

    a) PS1: Matter and its interactions
    b) PS2: Motion and stability: Forces and interactions
    c) PS3: Energy
    d) PS4: Waves and their applications in technologies for information transfer

    Life Sciences

    e) LS1: From molecules to organisms: Structures and processes
    f) LS2: Ecosystems: Interactions, energy, and dynamics
    g) LS3: Heredity: Inheritance and variation of traits
    h) LS4: Biological evolution: Unity and diversity

    Earth and Space Sciences

    i) ESS1: Earth's place in the universe
    j) ESS2: Earth's systems
    k) ESS3: Earth and human activity

    Engineering, Technology and Applications of Science

    l) ETS1: Engineering design
    m) ETS2: Links among engineering, technology, science, and society

[6] National Research Council's (NRC) Framework for K-12 Science Education

Elevating and Integrating the Arts

Great schools have arts.[1]

This statement is so intuitively true that all of us—educators, families, students, and other members of the community—agree without hesitation.

And there's plenty of research to explain why. Study after study has shown that students who have the opportunity to participate in arts education do better academically, are more engaged in learning, are less likely to drop out of school and go on to college, and as adults are more likely to exhibit pro-social behavior when compared to peers who haven't had an education in the arts.[2]

The arts are, simply, a fundamental part of a great public education. The arts are key to students' academic development and just as key to students' growth into creative adults and thoughtful, engaged citizens.

Vision: All Students, All Seattle Engaged in 21st Century Arts Learning

The Arts Plan Vision is that all students in all Seattle Public Schools will have opportunities to learn through the arts, helping them be successful in school and in life. Arts education will be valued citywide for student growth in arts skills and techniques, and for student development of the 21st century skills cultivated through artistic practice. All schools will rely on core arts classes, integrated arts instruction, and school-community arts partnerships with teaching artists and community arts organizations to engage students, deepen learning in all subjects, and prepare students for participation in the creative, innovation-based economy of Seattle. All families will know that their children, no matter where they live, will attend an arts-rich school. Schools will coordinate with each other to ensure high-quality, equitable arts education and provide a continuum of learning from kindergarten through high school.

The District central office, with its partners in the Seattle K-12 Arts Learning Collaborative, will provide ongoing arts education support to all teachers, staff, principals, and regional executive directors in Seattle Public Schools. Every principal will be empowered with tools, knowledge, and skills to be an arts champion and an instructional leader for families, teachers, staff, and community arts organizations. Every school will have an arts plan that will be a road map for creating an arts-rich school community and growing and sustaining the arts as an integral component of the school's and region's education plans. Schools from elementary through high school will have made room for the arts as a core subject in all students' schedules and will prioritize equitable access to arts learning opportunities.

Ongoing partnerships between schools and community arts organizations will enhance and broaden students' arts experiences; provide professional development to teachers, community arts organizations, and teaching artists; and connect students to Seattle's diverse cultural traditions.

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[1] Excerpted from Seattle K-12 Arts Plan, a collaborative effort of the Seattle Office of Arts & Cultural Affairs and Seattle Public Schools, p. 12-13. Much content in this section is excerpted or adapted from this Plan, which can be found on the district's website at https://www.seattleschools.org/academics/curriculum/arts/the_creative_advantage.

[2] Hines, 2006

Seattle K-12 Arts Plan[3]

Enduring Understandings for SPS Visual and Performing Arts

- The arts reveal who we are.
- The arts are a means of communication.
- The arts foster creativity and critical thinking skills central to life and career.

21st Century Skills to Be Cultivated Through SPS Arts Learning

- **Creative and Critical Thinking:** To create new and useful ideas, innovations, and products; and to elaborate, refine, analyze, and evaluate one's own and others' ideas.
- **Communication:** To articulate thoughts and emotions effectively using oral, written, and nonverbal skills; to listen effectively; to inform, instruct, motivate, and persuade; to negotiate; and to give and receive feedback.
- **Collaboration:** To work effectively and respectfully with diverse teams, which involves flexibility, sharing, responsibility, and being open and responsive to new and diverse perspectives.
- **Perseverance and Growth Mind-set:** A belief that intelligence and ability can be increased with effort; a belief in one's own capabilities and capacity to learn. A growth mind-set is foundational to perseverance: persisting in a task through to completion; remaining focused; and looking for ways to reach one's goal in the face of obstacles.

The arts are a core component of basic education, and they are uniquely suited to develop 21st century skills such as creative and critical thinking, communication, and perseverance—skills directly linked to student success in school, career, and life (Conley, 2007; Duckworth, Peterson, Matthews, & Kelly, 2007; Hetland, Winner, Veenema, & Sheridan, 2007; National Research Council, 2012).

In 2012, Seattle Public Schools (SPS) conducted a study of students' arts access across the District (deSoto 2012b). The results of the study show that arts access was low, with 40% of our K- 3 students receiving no arts instruction from an arts teacher. In addition, a student's race, and ethnicity, and/or English Language Learner and Free and Reduced Lunch status was predictive of arts access.

SPS's return to a neighborhood school model brings to the forefront the need for equity in arts programming across the District. Now that the majority of students are assigned to their neighborhood schools, families should be guaranteed a minimum level of arts access, with clear K-12 pathways of arts learning in every region of the city. This guarantee to families and students will, in turn, drive staffing, resources, and central office supports to schools in a predictable and equitable manner.

The comprehensive Seattle K-12 Arts Plan is focused on increasing access to high-quality arts education for all the District's students. It calls for increases in arts staff and enhanced central supports to schools, as well as coordination of school-community arts partnerships in support of the District's goals.

The Seattle K-12 Arts Plan outlines the goals that SPS, our community, the City, and our partners have agreed are critical for our students and the strategies and tactics that will ensure we meet our obligation—that all students in all SPS schools can learn through the arts.

Seattle K-12 Arts Plan Goals [4]

Every SPS middle school student receives:

- A minimum of two semesters of visual, performing, or media arts classes
- Integrated arts instruction in a sixth-grade language arts, science, or social studies class
- Arts options that are diverse and relevant, and lead to sequential learning opportunities in high school

Seattle K-12 Arts Plan Strategies

The Seattle K-12 Arts Plan aims to embed the strategies for increased arts education into the very DNA of the District and city, improving student outcomes across a variety of measures by transforming the practices of schools, community arts organizations, funders, and the community at large. Strategies that affect the design of school facilities are identified in the section "What Do We Do - Visual and Performing Arts."

[3] Ibid, pp. 8-9.
[4] Ibid, p. 9.

Moving to Promote Lifelong Fitness

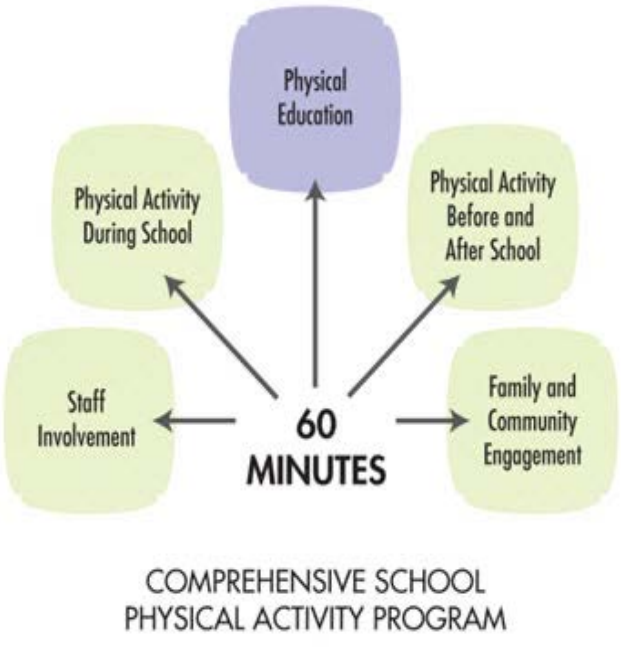
Beginning in 2008, the National Center for Chronic Disease Prevention and Health Promotion, a division of the Centers for Disease Control and Prevention, published the first Comprehensive School Physical Activity Program. This program, developed in conjunction with SHAPE America (the Society of Health and Physical Educators), is a "multi-component approach by which school districts and schools use all opportunities for students to be physically active, meet the nationally recommended 60 minutes of physical activity each day, and develop the knowledge, skills, and confidence to be physically active for a lifetime. A CSPAP reflects strong coordination and synergy across all of the components: quality physical education as the foundation, physical activity before, during, and after school, staff involvement, and family and community engagement."[1]

Seattle Public Schools adopted the Comprehensive School Physical Activity Program as part of its Physical Education Policy 2185 in June of 2014.[2] See section entitled "Physical Education – Program Description" for further program information and facility requirements.

The following sections are adapted from the Centers for Disease Control and Prevention "Healthy Schools" website.

CSPAP Goals

- To provide a variety of school-based physical activities to enable all students to participate in 60 minutes of moderate-to-vigorous physical activity each day.
- To provide coordination among the CSPAP components to maximize understanding, application, and practice of the knowledge and skills learned in physical education so that all students will be fully physically educated and well equipped for a lifetime of physical activity.



COMPREHENSIVE SCHOOL PHYSICAL ACTIVITY PROGRAM

Quality Physical Education

Physical education is an academic subject and serves as the foundation of the CSPAP, by providing the opportunity for students to learn knowledge and skills needed to establish and maintain physically active lifestyles throughout childhood and adolescence and into adulthood. It:

- Meets the needs of all students.
- Is an enjoyable experience for all students.
- Keeps students active for most of physical education class time.
- Teaches self-management.
- Teaches skills to maximize movement proficiency.
- Emphasizes knowledge and skills for a lifetime of physical activity.
- Can increase student participation in physical activity, increase physical fitness, and enhance student knowledge and skills about why and how they should be physically active.

[1] Centers for Disease Control & Prevention > CDC Healthy Schools > Promoting Healthy Behaviors > Physical Education and Physical Activity, accessed November 2020.
[2] Seattle Public Schools Policy No. 2185, "Physical Education," June 4, 2014 on SPS website > School Board > Policies and Procedures > Series 2000 - Instruction, accessed November 2020.

Physical Activity Before and After School

Before- and after-school physical activity programs offer students an opportunity to be physically active instead of waiting in a sedentary setting for the school day to begin or end.

Examples:

- Walking and biking to school programs.
- Physical activity clubs and intramural programs
- Informal recreation or play on school grounds.
- Integrating physical activity in homework during out of school hours.
- Interscholastic sports.

Before- and after-school physical activity programs can be coordinated with community-based organizations and delivered in school settings.

Physical Activity During School

Integrating physical activity within classrooms as part of planned lessons that teach mathematics, language arts, social studies, and other academic subjects through movement can increase students' overall physical activity and improve time-on-task and attentiveness.

Examples:

- Chapter review charades (Science)
- Active Alliteration (Language Arts)
- Jumping Jack Math (Math)

Components of Quality Physical Education[15]

Opportunity to Learn

- All students are required to take physical education.
- Instructional periods totaling 150 minutes per week (elementary school) and 225 minutes per week (middle and secondary school).
- Physical education class size is consistent with that of other subject areas.
- Qualified physical education teacher provides a developmentally appropriate program.
- Adequate equipment and facilities.

Appropriate Instruction

- Full inclusion of all students.
- Maximum practice opportunities for class activities.
- Students are physically active for at least 50% of instructional time.
- Well-designed lessons that facilitate student learning.
- Out of school assignments that support learning and practice.
- Physical activity not assigned as or withheld as punishment.
- Regular assessment to monitor and reinforce student learning.

Meaningful Content

- Written, sequential curriculum for grades PK–12, based on state and/or national standards for physical education.
- Instruction in a variety of motor skills designed to enhance the physical, mental, and social/emotional development of every child.
- Fitness education and assessment to help children understand, improve and/or maintain physical well-being.
- Development of cognitive concepts about motor skills, physical activity, and fitness.
- Opportunities to improve emerging social and cooperative skills and gain a multi-cultural perspective.
- Promotion of regular amounts of appropriate physical activity now and throughout life.

Student and Program Assessment

- Assessment is an ongoing, vital part of the physical education program.
- Formative and summative assessment of student progress.
- Student assessments are aligned with state/national physical education standards and the written physical education curriculum.
- Assessment of program elements that support quality physical education.
- Stakeholders periodically evaluate the total physical education program effectiveness.

Physical Activity Breaks in the Classroom

Physical activity breaks in the academic classroom allow students to take a mental and physical break from current academic tasks. These breaks can occur at any time during the school day, last from 5–30 minutes, and several times during the school day. Design teams shall consider how learning spaces can support physical as well as academic activities.

Examples:

- Taking a 5-minute stretch break.
- Jumping with an invisible jump rope.
- Doing semi-squats followed by knee lifts.
- Taking 2–3 laps around or throughout the classroom.

Planning for Tomorrow's Technology Needs

Making strategic investments in technology supports learning and teaching in the classroom; delivers services to students, teachers, staff, and families; and improves efficiency in business processes. Planning continues to prioritize equitable access and to reflect research-based best practices for implementing emerging technologies that enhance teaching and learning.

Vision[1]

The Department of Technology Services (DoTS) enables all staff and students to be successful through a secure ecosystem of information, collaboration, software, services, and technology.

Goals

DoTS has organized and aligned its work to be in service to the district's vision, mission, Formula for Success, and the SMART goals. All operations and projects are directly aligned to district goals. The Infrastructure & Security program is aligned to improve systems but stands alone at times with its focus on safety, security, privacy, and compliance.

DoTS works closely with programs and departments to meet their needs in their efforts to achieve district goals. DoTS is committed to supporting the district's strategic goals:

- High Quality Teachers & Leaders: Teachers & leaders have hardware, software, online services, and support to meet their goals
- Multi-Tier System of Supports (MTSS): Teachers & leaders can access data to plan, improve, and assess teaching and learning
- Eliminating the Opportunity Gap (EOG): Ensure all students have an opportunity to access the tools, resources, and information to be prepared for college, career, and life
- Improve Systems: Integrate and align operational, business, technology, and academic systems to support the needs of students, teachers, and schools
- Community Engagement: Support and enable consistent communications and engagement among all stakeholders to foster trust and collaboration to support academic success
- Improve Systems Security: Ensure all technology and data used to support students, teachers, and leaders is secure and meets compliance and privacy requirements

Student Learning & Support[2]

Seattle Public Schools technology plan for student learning is based on two key documents: the research foundation outlined in The Principles of Effective Digital Learning developed in 2018, and the State of Washington Education Technology Standards published by the Office of the Superintendent of Public Instruction (OSPI) in 2008 and updated in May 2018.

[1] Vision, Mission & Goals are from the 2019-2023 Seattle Public Schools Technology Plan, p. 13.
[2] 2019-2023 Seattle Public Schools Technology Plan, p. 25.

Principles of Effective Digital Learning[3]

The Principles were developed in discussions with district leadership, based upon the review of literature, and upon two frameworks that are central to teaching and learning within the district: Charlotte Danielson's A Framework for Teaching and a pyramid of pedagogical knowledge based on The Skillful Teacher from Research for Better Teaching, Inc.

Both frameworks address components related to curriculum planning, motivation, instructional strategies, and managing learning. An analysis of the crossover between the frameworks resulted in the development of the following principles:

Principle 1: Digital resources promote student achievement for all students, especially historically underserved students, when students use them to produce information rather than passively consume information, but technology use alone is ineffective unless mediated by a skillful teacher

Principle 2: Digital resources help teachers develop authentic learning opportunities that align with the depth of rigor of college-and-career ready standards and are relevant and meaningful to students

Principle 3: Digital resources have and continue to change what "literacy" and "being literate" mean and look like

Principle 4: Digital resources can help but alone are insufficient for helping students authentically engage in learning

Principle 5: Digital resources allow students and teachers to connect and collaborate with other students, teachers and other influential adults, and with the content

Principle 6: Digital resources provide opportunities for students to demonstrate mastery of learning goals in a variety of ways

Principle 7: Digital resources allow teachers and students to monitor progress towards learning goals

K-12 Educational Technology Standards[4]

Educational Technology is part of Basic Education in Washington

Washington State's Basic Education Act of 1993 established four common learning goals for all Washington students, designed to create high-quality academic standards and raise student achievement.

These four learning goals, updated in 2011, are the foundation of all academic learning standards in Washington:

1. Read with comprehension, write effectively, and communicate successfully in a variety of ways and settings and with a variety of audiences.
2. Know and apply the core concepts and principles of mathematics; social, physical, and life sciences; civics and history, including different cultures and participation in representative government; geography; arts; and health and fitness [now named physical education].
3. Think analytically, logically, and creatively, and to integrate technology literacy and fluency as well as different experiences and knowledge to form reasoned judgments and solve problems.
4. Understand the importance of work and finance and how performance, effort, and decisions directly affect future career and educational opportunities.

2008 Educational Technology Standards: Technology Literacy and Fluency[5]

The initial Educational Technology Standards developed by the Office of Superintendent of Public Instruction in 2007-08, and adopted by Seattle Public Schools, defined technology literacy and technology fluency, in this way:

[3] Principles for Effective Digital Learning: A Review of Literature prepared for Seattle Public Schools, John D. Ross, Ph.D., August 2018. Available at SPS > Departments > Technology Services > Key Documents.
[4] This section excerpted & adapted from K-12 Educational Technology Learning Standards, May 2018. Available at www.k12.wa.us > Student Success > Resources by Subject Area > Educational Technology > 2018 Educational Technology Standards.
[5] OSPI website on Educational Technology, http://www.k12.wa.us/EdTech/TechLiteracy/TechLit.aspx, March 2016.

What is technology literacy?

The ability to use the right technology responsibly, creatively and effectively to:

- Apply technology to real-world experiences.
- Adapt to changing technologies.
- Modify current and create new technologies.
- Personalize technology to meet individual needs, interests and learning styles.

What is technology fluency?

Fluency takes students to the next level, so they can:

- Communicate, access, collect, manage, integrate, and evaluate information.
- Solve problems.
- Build and share knowledge.
- Improve learning in all subject areas and experiences.

2018 Educational Technology Standards Update

Starting with these definitions, educators from across the state assisted OSPI in updating the Standards, and recommended adoption of the 2016 International Society for Technology in Education (ISTE) student standards.

These standards are indicated in bold below, with bullet points identifying the developmentally appropriate performance indicators for middle schools (Grades 6-8):

1. **Empowered Learner: Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.**
   - Students articulate personal learning goals, select, and manage appropriate technologies to achieve them, and reflect on their successes and areas of improvement in working toward their goals.
   - Students identify and develop online networks within school policy and customize their learning environments in ways that support their learning, in collaboration with an educator.
   - Students actively seek performance feedback from people, and from functionalities embedded in digital tools to improve their learning process, and they select technology to demonstrate their learning in a variety of ways.
   - Students can navigate a variety of technologies and transfer their knowledge and skills to learn how to use new technologies.
2. **Digital Citizen - Students recognize the rights, responsibilities, and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.**
   - Students manage their digital identities and reputations within school policy, including demonstrating an understanding of how digital actions are never fully erasable.
   - Students demonstrate and advocate for positive, safe, legal and ethical habits when using technology and when interacting with others online.
   - Students demonstrate and advocate for an understanding of intellectual property with both print and digital media- including copyright, permission, and fair use, by creating a variety of media products that include appropriate citation and attribution elements.
   - Students demonstrate an understanding of what personal data is and how to keep it private and secure, including the awareness of terms such as encryption, HTTPS, password, cookies, and computer viruses; they also understand the limitations of data management and how data-collection technologies work.
3. **Knowledge Constructor - Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.**
   - Students demonstrate and practice the ability to effectively utilize research strategies to locate appropriate digital resources in support of their learning.
   - Students practice and demonstrate the ability to evaluate resources for accuracy, perspective, credibility and relevance.

- Students locate and collect resources from a variety of sources and organize assets into collections for a wide range of projects and purposes.
- Students explore real-world issues and problems and actively pursue an understanding of them and solutions for them.

4. **Innovative Designer - Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.**
   - Students engage in a design process and employ it to generate ideas, create innovative products or solve authentic problems.
   - Students select and use digital tools to support a design process and expand their understanding to identify constraints and trade-offs and to weigh risks.
   - Students engage in a design process to develop, test and revise prototypes, embracing the cyclical process of trial and error and understanding problems or setbacks as potential opportunities for improvement.
   - Students demonstrate an ability to persevere and handle greater ambiguity as they work to solve open-ended problems.
5. **Computational Thinker - Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.**
   - Students practice defining problems to solve by computing for data analysis, modeling, or algorithmic thinking.
   - Students find or organize data, use technology to analyze, represent it to solve problems, and make decisions.
   - Students break problems into component parts, identify key pieces and use that information to problem solve.
   - Students demonstrate an understanding of how automation works and use algorithmic thinking to design and automate solutions.
6. **Creative Communicator - Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals.**
   - Students select appropriate platforms and tools to create, share and communicate their work effectively.
   - Students create original works or responsibly repurpose other digital resources into new creative works.
   - Students communicate complex ideas clearly using various digital tools to convey the concepts textually, visually, graphically, etc.
   - Students publish or present content designed for specific audiences and select platforms that will effectively convey their ideas to those audiences.
7. **Global Collaborator - Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.**
   - Students use digital tools to interact with others to develop a richer understanding of different perspectives and cultures.
   - Students use collaborative technologies to connect with others, including peers, experts and community members, to learn about issues and problems or to gain broader perspective.
   - Students determine their role on a team to meet goals, based on their knowledge of technology and content, as well as personal preference.
   - Students select collaborative technologies and use them to work with others to investigate and develop solutions related to local and global issues.

Technology Integration[6]

Technology integration is the use of technology resources – computers, digital cameras, software applications, the Internet, handheld devices, etc. – to support teaching and learning across all subject areas and grade levels.

Integrated into the classroom, technology becomes a multi-modal way to extend learning. It provides a medium that unpacks the world and opens new channels through which students show what they know and can do. Also, technology can introduce different perspectives on life and culture through the immediacy of videoconferences, email dialogue and interactive webinars. Conversation among learners and experts anywhere enriches learning and provides insight into the creative tangents that lead to

[6] This section excerpted from OSPI K-12 Educational Technology Learning Standards, December 2008, pp. 4.

expert knowledge. These learning experiences achieve relevancy, as the struggles, limits, and potentials of problem-solving in the real world move theory into practice for young learners. Technology integration is achieved when:

- It is a seamless part of the learning process.
- The use of technology is routine and transparent.
- Technology is accessible and readily available for the task at hand.
- Technology tools support curricular goals and state standards.
- It helps students reach their learning goals.

Meeting the Needs of All Students[7]

Culturally Responsive Teaching

Student diversity in the classroom is bringing a greater richness to the American educational setting. Changing demographics, social and economic trends have important implications for education in the 21st century. This culturally and linguistically diverse student population opens new opportunities for greater inclusion and equity. However, uneven access to technology (the digital divide) can hinder success.

Honoring All Cultures

Many areas throughout Washington have seen a tremendous growth in immigration and a corresponding increase in diversity. Technology provides a venue that makes honoring and learning about all cultures easier to do within the confines of a classroom.

Differentiating Instruction with Technology

Teachers must find the instructional balance point between those students who come to school academically and technologically ready to learn, and those who struggle to understand each lesson or have only limited access to technology in daily life. Technology increases the opportunities for teachers to create differentiated content, to address students with different learning styles. One of the great strengths of technology integration lies in its power to create a variety of instructional approaches over the one-size-fits-all lesson plan.

Addressing Special Needs

There is no doubt that technology continues to change the lives of students with special needs. High on the list of the benefits of assistive and adaptive technologies are greater independence and productivity and expanded opportunities for social inclusion. New and emerging technologies have the power to connect and engage special needs students with 21st century teaching and learning.

Equity, Access, and the Essential Conditions

A quality education means every child – with no exceptions – has access to a technology-rich, 21st century skills-based learning environment. Although 99%+ of Washington State classrooms have at least one computer connected to the Internet and many classrooms can take advantage of an LCD projector or document camera, concentration, access, and equipment condition varies greatly.

Researchers and educators investigating the many dimensions of technology in education have identified essential conditions that optimize the likelihood that technology integration will make a positive contribution to teaching and learning. Three of these conditions are critical if schools are to integrate these technology standards successfully:

- Equalized access for every classroom to a high-speed Internet connection, up-to-date computers and a variety of digital teaching and learning technologies.
- Professional development that promotes learner-centered instruction and technology integration.
- Sustainable and sufficient funding to keep the infrastructure of network and classroom technologies current and reliable.

[7] This section excerpted from OSPI K-12 Educational Technology Learning Standards, December 2008, pp. 5-6.

Environmental Conditions Critical for Learning

"**Children are not little adults**.
They have unique needs, sensitivities, and vulnerabilities…"[1]

"Trigger the senses. Sound, smell, taste, touch, and movement power memory.
An environment rich in sensory experiences helps students retain and retrieve what they learn."[2]

School building conditions such as indoor air quality, thermal comfort, lighting and views, and acoustics and noise **play an important role in a student's ability to focus, process new information, and feel engaged** at school."[3]

In recent years, Harvard's T.H. Chan School of Public Health has published two key documents linking healthy school buildings to student learning: "The 9 Foundations of a Healthy Building," and "Foundations for Student Success: How School Buildings Influence Student Health, Thinking and Performance."

Everyone involved in the design of school buildings is encouraged to become familiar with these documents. Some of the most compelling findings, along with recommendations, are cited below.

Ventilation and Air Quality:

- Children have developing lungs with narrow airways and compared with adults, they breathe larger volumes of air relative to their body size.[4]
- Because humans spend up to 90% of their time in offices, schools, and residences, and inhalation exposure is continuous, our largest exposure to pollutants (of both indoor and outdoor origins) occurs indoors. In offices, schools, and residences alike, these pollutants may come from printer emissions, pest and rodenticides, cleaning supplies, personal care products, paint, pollen, and fungal spores. And while we know a lot about exposure and risk associated with many indoor air pollutants, there are 82,000 chemicals in commercial use, 85% of which do not have any available health data.[5]
- Adverse effects have been reported for elevated CO2 levels in classrooms, including increased student absence (Gaihre et al., 2014; Simons et al., 2010), … and symptoms of wheezing among children in daycare centers (Carreiro-Martins et al., 2014). Lower ventilation rates have been linked to more missed school days caused by respiratory infections (Toyinbo et al., 2016a); …greater mean number of school nurse visits caused by respiratory symptoms (Haverinen- Shaughnessy et al., 2015a); increased asthmatic symptoms,… and risk for viral infections (Chatzidiakou et al., 2012); and the transmission of airborne infectious diseases such as chickenpox, measles, and influenza (Li et al., 2007; Luongo et al., 2015).[6]
- Exposure to indoor pollutants such as VOCs and carbon dioxide can…have direct impacts on cognitive function.[7]
- Improving IEQ can positively affect cognitive function outcomes, such as decision-making, attention, concentration, and memory.[8]
- Multiple studies have shown that when steps to mitigate poor IEQ are taken, students' academic performance improves (Basch, 2011; Centers for Disease Control and Prevention, 2009a; La Salle & Sanetti, 2016; Michael et al., 2015).[9]

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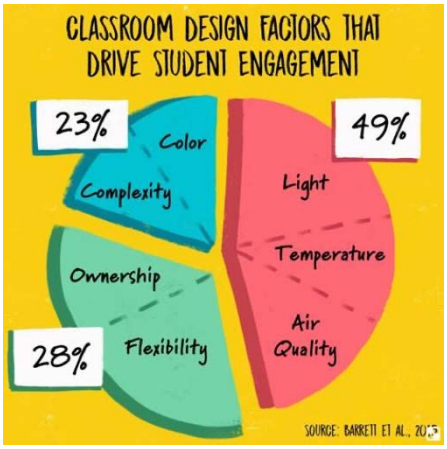
[1] Foundations for Student Success: How School Buildings Influence Student Health, Thinking and Performance; Joseph G. Allen et al., Harvard T.H. Chan School of Public Health; 2018, revised 2021, p. 6.
[2] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 177.
[3] Ibid, p. 11.
[4] Ibid, p. 12.
[5] The 9 Foundations of a Healthy Building, Joseph G. Allen et al., Harvard T.H. Chan School of Public Health, 2017, p. 11.
[6] Foundations for Student Success: How School Buildings Influence Student Health, Thinking and Performance; Joseph G. Allen et al., Harvard T.H. Chan School of Public Health; 2018, p. 13. (*references can be accessed at schools.forhealth.org*)
[7] The 9 Foundations of a Healthy Building, Harvard T.H. Chan School of Public Health, 2017, Intro 'How to Achieve the 9 Foundations of Healthy Buildings', p. 12.
[8] Foundations for Student Success, p. 13.
[9] Ibid, p. 13.

- Cold and dry environments have been found to facilitate the spread of the influenza virus because low humidity levels permit virus particles to stay in the air longer and low temperatures prolong the virus shedding period. On the other end of the spectrum, warm humid environments are conducive to mold and fungal growth.[10]

RECOMMENDATIONS:

- The aim of good ventilation is to ensure a comfortable, healthy, and productive indoor environment throughout the day and to respond to the number of occupants in a space. ASHRAE recommends an acceptable IAQ, i.e. a minimum classroom ventilation rate of 15 cubic feet of outside air per person to keep indoor carbon dioxide concentrations at or below 1000 ppm (ASHRAE, 2016).[11]
- Meet or exceed local outdoor air ventilation rate guidelines to control indoor sources of odors, chemicals, and CO^2.
- Filter outdoor and recirculated air with a minimum removal efficiency of 75% for all particle size fractions including nano.
- Avoid outdoor air intakes at street level or near other outdoor sources of pollutants.[12]
- Choose furnishings and building materials with low chemical emissions to limit sources of volatile and semi-volatile organic compounds.
- Limit vapor intrusion by using a vapor barrier.
- Maintain humidity levels between 30-60% to mitigate odor issues.[13]



"*An ambitious university-led study of 153 classrooms in 27 schools in the United Kingdom in 2015 looked at three dimensions of classroom design: naturalness (factors like light and temperature), stimulation (color and complexity), and individualization (flexibility and student ownership). Optimizing all of these physical characteristics improved academic performance by 16 percent.*"[14]

Dust & Mold:

- The mass of dust that enters our body every day is relevant to human health because dust acts as a reservoir or sink for a variety of potentially harmful agents -- outdoor particles that penetrate indoors, viruses, bacteria, chemicals, allergens, building materials, dander, fabric fibers, and paint flakes that contain lead.[15]
- In a study of over 1,000 students, the concentration of molds in floor dust was associated with concentration problems, headache, and dizziness (Kim et al., 2007).[16]
- Students cannot perform well if they are not present physically. The presence of visible mold, humidity and poor ventilation were all independently associated with absenteeism in a study of schools in New York State (Simons et al., 2010).

RECOMMENDATION:

- Limit tracking in dirt.[17] Use grates that can be cleaned and maintained, and/or provide substantial areas of walk off mats at entries.

[10] The 9 Foundations of a Healthy Building, p. 15.
[11] Foundations for Student Success, p. 12.
[12] Ibid, p. 6.
[13] Ibid, p. 1.
[14] Merrill, S., "Flexible Classrooms: Research is Scarce, But Promising", Edutopia, June 14, 2018.
[15] Ibid, p. 20.
[16] Foundations for Student Success, p. 18.
[17] The 9 Foundations of a Healthy Building, p. 6.

Thermal Conditions:

- Young children have higher metabolic rates, higher core body temperatures, less developed thermo-regulation capabilities, and a wider range of thermal responses.[18]
- Thermal conditions can distract occupants of school buildings from their ability to stay focused in the classroom.[19]
- Thermal conditions play a role in learning and performance of schoolchildren. In a survey of more than 4,000 sixth grade students, those who reported that they had never experienced high indoor temperatures achieved 4 percent more correct answers on a national mathematics test compared to students who experienced high temperatures daily. Another study of more than 3,000 schoolchildren in 140 fifth grade classrooms found that each 1-degree Celsius decrease in temperature within the range of 20-25 degrees (68-77 degrees F) was associated with an increase in students' average test scores in mathematics.[20]
- Thermal health characteristics including humidity have been associated with the development and exacerbation of respiratory symptoms in adults and children in schools.

RECOMMENDATION:

- Meet minimum thermal comfort standards for temperature and humidity and keep thermal conditions consistent throughout the day. Provide individual level thermal control, where possible.[21]
    - The building envelope should be designed to maintain thermal comfort standards, including consistent thermal conditions throughout the day, so that students are not distracted from their studies by fluctuating temperatures or drafts.

Lighting and Views:

- Although studies of lighting impacts in school environments are limited, we do know that children are more sensitive to light exposure than adults because they have larger pupils and have significantly greater light-induced melatonin suppression, with young adults having greater circadian-system sensitivity to light exposures than older adolescents.[22]
- The eye has dual roles: It detects light to allow us to see but also detects light to tell the brain what time of day it is. These visual and 'non-visual" effects of light have different sensitivities to light intensity, spectrum, timing, pattern, and light history and are served by different light detectors (photoreceptors) in the eye. Both roles are important considerations when assessing the quality of a built environment.[23]
- Current lighting standards are designed to meet the needs of the visual system without accounting for the nonvisual, biological impacts of light. Yet being able to see in a space does not ensure that the circadian system is being adequately stimulated. Furthermore, even when a building is designed to bring more daylight indoors, occupants may not receive sufficient amounts to stimulate their circadian systems, especially in winter months. An accumulating body of evidence suggested that learning and memory can be impaired when the sleep-wake cycle is disrupted.[24]
- Low levels of light indoors in combination with less time spent outdoors have been associated with increased risk for nearsightedness (myopia). Conversely, studies have shown that increasing children's time spent outdoors may reduce the risk of developing myopia or slow its progressions.[25]
- Many studies on the health impacts of daylight have reported evidence for benefits, including improvement of vision, better sleep quality, and reduced symptoms of nearsightedness, eyestrain, headache, and depression. In children, higher levels of average daily daylight exposure have been associated with reduced weekday and weekend sedentary

[18] Foundations for Student Success, p. 21.
[19] Foundations for Student Success: How School Buildings Influence Student Health, Thinking and Performance; Joseph G. Allen et al., Harvard T.H. Chan School of Public Health; 2018, p. 22.
[20] The 9 Foundations of a Healthy Building, Harvard T.H. Chan School of Public Health, 2017, Intro 'How to Achieve the 9 Foundations of Healthy Buildings', p. 15.
[21] The 9 Foundations of a Healthy Building, p. 1
[22] Ibid, p. 23.
[23] The 9 Foundations of a Healthy Building, Harvard T.H. Chan School of Public Health, 2017, Intro 'How to Achieve the 9 Foundations of Healthy Buildings', p. 33.
[24] Foundations for Student Success, p. 24.
[25] Ibid, p. 23.

time and with increased levels of physical activity on the weekends.[26]

- Bright light with high illuminance--and blue-light exposure--have been associated with decreased daytime and higher nighttime melatonin concentrations, reduced daytime sleepiness, improved sleep duration, improved sleep efficiency, lower self-reported sleepiness, greater subjective well-being, and higher levels of alertness. High school students exposed to blue-enriched white light (300 lux, 5500K) in the early morning during winter have shown faster cognitive processing speed and better concentration performance than students in standard lighting conditions (300 lux, 3000-3500 K) (Keis et al., 2014)[27]
- Color temperature is another aspect of light that can affect building occupants' levels of alertness…dim warm-colored light has been shown to induce a calming effect in children. In a nine-month study of 110 students in primary (grade 3) and secondary school (grade 10), researchers found that a "relax" setting (325 lux, 3500K) was significantly associated with reduced restless behavior compared with children in "standard" program lighting classrooms.[28]
- Oral reading fluency (measured as words read correctly per minute) is an important precursor in the development of reading comprehension. A study of 172 U.S. third grade students tested the effect of high intensity (1000 lux, 6500K) glare-free "focus" lighting on students' oral reading fluency performance for a full academic year. By midsemester, students in the "focus" lighting showed a higher percentage increase in oral reading fluency performance compared with students in "standard" lighting (500 lux, 3500K) classrooms (36% vs 17%).[29]
- The same researchers conducted a follow up study among students from low socioeconomic backgrounds and found that by the end of the academic year, students in the "focus" lighting group showed larger gains in oral reading fluency performance than the non-focus lighting group.

RECOMMENDATIONS:

- Consider how circadian-stimulating electrical lighting can be combined with daylighting strategies to optimize the well-being of children in school.[30]
- During the day provide as much daylighting and/or high intensity blue-enriched lighting (480nm) as possible while maintaining visual comfort and avoiding glare. [31]
- Provide opportunities for students to get regular breaks outside.[32]
- Provide blue-enriched task lighting when necessary for comfortable viewing.[33]
- Aim to provide direct lines of sight to exterior windows from all "workstations."[34]
- Incorporate nature and nature-inspired design indoors.[35]
- For safety and security, provide adequate lighting in common areas, stairwells, emergency egress points, parking lots and building entryways.[36]
- Given the positive effects of warm-colored light in reducing restless behavior, combined with the benefits of higher color temperature lighting for alertness and reading, consider using variable lighting that can be programmed to provide the appropriate color temperature for the time of day and the activity.
- Strongly consider use of higher intensity, higher color temperature lighting to support students in learning to read at grade level by third grade, particularly for students furthest from educational justice.

Acoustics and Noise:

- Children under age 15 are more sensitive to difficult listening conditions because they are still developing mature language skills, and, compared with adults, children have more difficulty with complex listening tasks. Noise interference

[26] Ibid, p. 24.
[27] Ibid, p. 24.
[28] Foundations for Student Success, p. 25.
[29] Ibid, p. 25.
[30] Ibid, p. 25.
[31] Ibid, p. 2.
[32] Ibid, p. 33.
[33] Ibid, p. 33.
[34] Ibid, p. 33..
[35] Ibid, p. 33.
[36] Ibid, p. 33.

in the classroom can impair children's speech and listening comprehension as well as their concentration, understanding of verbal information, reading comprehension, and memory. In noisy conditions, children require a greater signal-to-noise ratio or less distortion from background noise to perform on par with adults in speech recognition tasks. [37]

- Research has shown that non-auditory higher cognitive processes such as memory and attention, which are critical elements of reading comprehension, develop slowly and thus children may be especially sensitive to chronic noise exposures.[38]
- Ensuring appropriate noise levels and listening conditions at school is essential to maintaining the ability of teachers to deliver instruction in the classroom effectively so that students can clearly and easily hear and understand what is being said. Two important aspects of hearing well in a classroom are background noise and reverberation time. Background noise is any "unwanted sound that interferes with what you want to hear" and has many sources both in and outside the classroom…The amount of background noise that enters a classroom depends in part on the walls' sound-transmission class, that is, their ability to block or carry noise. Reverberation time is the length of time sound lingers in a room; when a room has a long reverberation time, sound will echo and interfere with speech. It is important to have low background noise and short reverberation time in a classroom[39].
- The Acoustical Society of America recommends maximum background noise exposure levels of 35 dB for unoccupied core-learning spaces in permanent school buildings, as well as a maximum reverberation time of 0.6–0.7 seconds (depending on classroom volume). However, A3 Acoustics has advised that "targeting 35 dBA background noise would also allow for easier distractions from adjacent classrooms and corridors, requiring sound isolation upgrades for interior partitions, doors, and interior glazing, and would require HVAC noise control treatments beyond what is typical for school projects to maintain the 35 dBA total background noise target.[40]

RECOMMENDATIONS:

Note that acoustical criteria in WAC 246-366-110 Sound Control, ASHRAE, and WSSP, are minimum acceptable standards.

- Design teams performing work on any new construction or modernizations that include instructional or performance spaces shall include an acoustical engineer, whose report and recommendations shall be included in the design submittal no later than the Design Development phase.
- Any recommendations made to SPS to reduce acoustical treatments for whatever reason, including cost savings, shall include the estimated reduction in performance levels for each of the criteria noted below so that SPS understands how the reduction will affect the student's experience.
- Locate areas where learning requires focused attention away from the noisier areas of the site.
- Protect against outdoor noises such as traffic, aircraft, and construction. Control indoor sources of noise such as mechanical equipment, office equipment and machinery. Provide spaces that minimize background noise to 45 dB for unoccupied work and learning areas, and a maximum reverberation time of 0.7 seconds.
- Strongly consider Washington Sustainable Schools Protocol IEQ 4.1: Improved Acoustic Performance for students under 15 years of age where speech intelligibility is the most important, and for those schools with a significant number of students furthest from educational justice.
- Improved acoustic performance is recommended for projects where the Gymnasium will accommodate student assemblies: Maximum (unoccupied) reverberation times at all mid-frequency (500, 1000, 2000 Hertz) of:
    - Not greater than 1.3 seconds for gymnasiums of 150,000 cubic feet or less, OR
    - Not greater than 1.5 seconds for gymnasiums greater than 150,000 cubic feet.
- Improved acoustic performance is recommended for projects where the Student Dining/Commons is designed for presentations & performances: Maximum (unoccupied) reverberation times at all mid-frequency (500, 1000, 2000 Hertz) of:
    - Not greater than 1.2 seconds for Multi-Purpose, Commons or Cafeterias of 100,000 cubic feet or less, OR
    - Not greater than 1.4 seconds for Multi-Purpose, Commons or Cafeterias greater than 100,000 cubic feet.

[37] Ibid, p. 26.
[38] The 9 Foundations of a Healthy Building, Harvard T.H. Chan School of Public Health, 2017, Intro 'How to Achieve the 9 Foundations of Healthy Buildings', p. 29.
[39] Foundations for Student Success, p. 26.
[40] A3 Acoustics, Airplane Noise Analysis for Classrooms, Mercer International Middle School, 11/22/21, p. 2.

- Sound reinforcement systems shall be provided for all middle school teaching stations except the gymnasium and fitness room.
- A built-in performance sound reinforcement system for the Student/Dining Commons shall be designed by an acoustical engineer.
- When construction is sufficiently complete that acoustical measurements can confirm that the performance levels have been met, the acoustical engineer shall verify the actual acoustical performance of all student-occupied spaces.

Water Quality:

- Providing access to safe drinking water is critical to student health…And the evidence shows that when appropriate access to water is provided, water intake increases.[41]

RECOMMENDATIONS:

- Construction documents shall require compliance with the Seattle Public Schools Drinking Water Quality requirements found in the Technical Building Standards.
- Install water purification system for removal of contaminants, if necessary.
- Ensure residual disinfectant levels are sufficient to control microbes, but not in excess.
- Prevent water stagnation in pipes.[42]

Supporting Biophilia:

- Researchers in the field of environmental psychology have become increasingly interested in the restorative effects of visual access to natural environments. Students in classrooms with access to green views through their windows have been observed to experience significantly faster recovery from stress and mental fatigue and performed significantly higher on tests of attentional functioning, compared to students in classrooms with no windows or windows looking out onto other building facades. Buildings can bring nature in through biophilic design, which aims at improving indoor environments by incorporating natural elements into the design of the building.[43]
- Green space surrounding a school has been positively associated with reductions in chronic absenteeism, academic performance, restored attention capacity, decreased stress levels, reduced mental fatigue and aggression, and improved coping with attention deficit disorder.[44]
- Students' working memory, superior working memory, and attentiveness have also been significantly positively associated with the surrounding greenness, partly mediated by reduced exposure to traffic-related air pollution. The amount and type of space available also influences health; researchers found that larger school campuses, school buildings, and play areas (per enrolled student) are associated with higher levels of physical activity in middle school students.[45]

- (People) have become fluent in the visual language of nature's fractal scenery. We are "wired" to look at fractals and not the Euclidean catalogue of circles, squares, and triangles that most buildings are composed of. The fractal patterns described here are increasingly referred to as biophilic fractals because they are likely responsible for biophilia's well-known effects, including the reductions in mental

[41] Foundations for Student Success, p. 16.
[42] The 9 Foundations of a Healthy Building, p. 1.
[43] Ibid, p. 24.
[44] Foundations for Student Success, p. 29.
[45] Ibid, p. 29.

fatigue and stress observed in the pioneering psychology experiments that examined exposure to nature. Research has demonstrated significant increases in detection sensitivity, attention, visual performance (e.g., pattern recognition and navigation), aesthetic appeal and stress reduction. Conversely, the lack of fractal aesthetics in unnatural (man-made) environments puts a strain on the visual system, inducing negative responses such as headaches.[46, 47]

RECOMMENDATIONS:

- Prioritize access to green views from spaces in which students spend much of their day -- classrooms and labs rather than hallways and stairwells.
- Utilize a variety of strategies for incorporating natural elements in the design of school buildings to evoke nature through biophilic design.
- Consider the use of fractal patterns displaying mid-range complexity within the school environment to reduce mental fatigue and refresh the ability to concentrate.

Importance of Physical Activity

- In the U.S., students are experiencing an increasing number of health burdens; one in three children exceed a normal, healthy body weight (National Collaborative on Education and Health, 2015), and visual health and levels of physical activity are declining as students increase their screen time (Centers for Disease Control and Prevention, 2014). These pressing concerns merit greater attention when designing school buildings precisely because this is the place where children spend most of their time outside the home.[48]

RECOMMENDATIONS:

- Active Design:[49]
    - Incorporate design elements that promote and encourage activity, such as easily accessible staircases and recreational areas.
    - Provide ergonomic furnishings that minimize discomfort and limit the development of chronic physical injuries.

[46] Taylor, R.P. "The Potential of Biophilic Fractal Designs to Promote Health and Performance: A Review of Experiments and Applications," University of Oregon Physics Department, published in Sustainability, 2021.
[47] Photo credit: fractalfoundation.org.
[48] Foundations for Student Success, p. 7.
[49] The 9 Foundations of a Healthy Building, p.7

What Students Tell Us

"**Our job is to create rooms filled with students' voices**."[1]

As noted in the Introduction to this document, student workshops were conducted in the spring of 2021 to gather students' perspectives on the design of middle school learning environments. The Mercer Middle School project design team formulated questions based upon the district's Strategic Plan goals; then Mercer staff facilitated two advisory sessions in which all students in the school were given the opportunity to provide their input.

Each advisory session focused on different questions. Students responded with words and images in "Padlet" software that Mercer staff and students are accustomed to using. The design team observed the sessions, then was provided with links to the websites that retained the students' responses.

Patterns observed in the students' responses are offered below. *Student comments without capitalization or punctuation are quoted as they were shown in the padlets; images are those that the students provided.*

MERCER BUILDING DESIGN - SESSION 1

1. **What would make you feel welcome at a new school? What would it look like? What would it feel like?**

   A majority thought that lots of windows, natural light, and warm cheerful colors are important:

   "a modern building that has more sunlight, like big windows and the lunchroom should also have even more sunlight so you can eat but at the same time have a nice view"

   "big windows so we see a lot of sunlight, and make it feel more open"

   "lots of windows; I need natural light to shine in or I will feel dead"

   "I want big windows, and lots of light"

   "*wider windows in classrooms…more vibrant paint to boost people's mood"*

   "spacious, good natural lighting, simple building design"

   "I think we should add windows with multiple colors so we can feel comfortable and happiness"

   "looks nice and bright"

   "a warm color scheme to make it feel warm and welcoming"

   "warm lighting, warm color scheme"

   "warm colors to feel welcome"

   "very colorful and welcoming rooms and hallways"

   "bright, warm classrooms"

   "cool modern art and bright colors"

   "make it bright, not too bright, but have enough color to kinda spark you"

[1]Educator and author Pernille Ripp, at pernilleripp.com, accessed December 2021.

Some described the importance of adequate space:

"I would feel welcome with a smaller number of students so it is not overcrowded."

"For the hallways to be wider so you wouldn't be squeezed"

A surprising number of students emphasized the importance of plants, outdoor areas, and connections to nature:

"more plants within the school and more windows so it brightens the mood"

"Surrounded by nature and PLANTS!!!"

"colorful, inspirational quotes, lots of plants (a garden)"

"outdoor meeting space: a garden space that has benches or seating areas for students to meet and talk before or during school. This space would be filled with plants and greenery to create a cozy and safe environment."

A significant number of students asked for a more modern building to make them feel welcome:

"modern design"

"a modern building"

"a modern building with 2 floors"

"more modern, maybe 2 story and roof space for hangout or anything"

"probably a modern building, or a building that feels like home. I suggest 2 floors since I like modern buildings to be 2 floors or more"

"The school would be a really big brick building, with picnic tables outside and a good climbing tree. It would feel cozy."

"I would want a more modern building so that when you are in a classroom you can see outside"

"it's 2 or 3 story and has a bigger play/recess area where people can talk and play sports"

Others suggested specific spaces such as:

"mega art studio"

"show off lots of student art"

"cool hang out spots"

"maybe a little lounge area?"

"a nice basketball court"

"better bathrooms"

"a snack bar"

2. What would make you feel excited and inspired? What would it look like? What would it feel like?

Several students thought that inspiring quotes or images from noteworthy people would be a positive contribution:

"maybe quotes from famous people that motivates us to keep striving? There could be some murals that have colors to keep everything vibrant and energized. I want to feel motivated and empowered by the way the school is"

"maybe put people who inspire us to be better people on the walls?"

"a hallway or glass trophy thing with inspirational quotes by famous people."

"A big inspiration wall and have more than one"

Some thought that the architectural scale, character, or building organization could be inspiring:

"I want it to be big so I can feel like I am in college"

"I want the school to look fun and cool"

"a school with lots of windows and a big entrance"

"natural light and airy"

"keep the separation of the grades so you don't have to go in and out and in at different buildings all day"

Others thought that a particular feature would make them feel more excited about school:

"beautiful art"

"I think you should have a big library. With two floors with cozy spaces to sit and read. Both a space to get books and a pleasant place to read them."

"I think you should have a bigger and better kitchen for the lunch ladies to work in so they don't have to just give us freeze dried meals."

"I would be excited in a new school that has a big playground and volleyball courts and gender-neutral restrooms"

"maybe a lounge where people can hang out when they're waiting to get into the office"

"they could put a room for teachers to meet with their families, there's like a private room so people won't randomly eavesdrop on what happened…"

"a non-intimidating principal's room"

Several thought that a unique outdoor feature, creative seating, or other outdoor amenities would be inspiring:

"an addition to the school - something that usually isn't in other schools - like a garden, gazebo, arch, fountain or something"

"I think you should have interesting places to sit outside, more than just picnic benches -- get creative."

"more grass than asphalt because it is more absorbent and looks a lot nicer than anything you could do with concrete, and I think that when you do have to do concrete it should be that kind that looks like a Rice Krispie treat and sucks up all the water."

"skylight, cool plants"

"outdoor classroom / reading and hanging out space"

"I think you should have multiple outdoor classrooms."

3. How could your school interact with your family? What would it look like? What would it feel like?

Some students spoke to the need for good orientation and wayfinding for families:

"more signs to get around the school easier"

"good labels to say what room does what"

Some suggested specific places to support positive family-school interaction:

"maybe a place where parents and guardians meet up to discuss problems, school-wise"

"Possibly a meeting room/conference room where parents and teacher could discuss things! It would look like if it were a meeting in a movie, where they're all talking and having fun! It would feel as if there are no worries or problems to tell my parents. Everything in school is alright, and safe!"

"add a room where our parents and us can hang out"

"communal spaces that the family and community can use"

"rooms with good vibes and lots of plants for parents to be in when they come to school"

"Community spaces. Places where families can post notes to students, share cultural events/local events"

"a private office to talk to whoever wanted to speak with my family - in that office it would be put to everyone's comfort in the room"

MERCER BUILDING DESIGN - SESSION 2

1. **In what ways could a school building reflect the cultural identities and values of students? What would it look like? What would it feel like?**

   Many students suggested <u>different types of artwork</u>:

   "A wall full of paintings…"

   "murals"

   "posters or pictures of different cultures."

   "pictures, paintings, and a big area where it can all be seen"

   "paintings and all sorts of cultural posters"

   "something that could reflect cultural identities is having a wall of art or handprints from students and know they would be things about you and your culture"

   "add some paintings representing cultures"

   "art that reflects a lot of cultures"

   "by hanging up art from different parts of the world or things that represent different cultures"

   "there could be art made by students of all different backgrounds"

   "maybe painting the walls representing different cultures instead of just blue. And a place to put up students' art work."

   "Cultural art that represents the people of Beacon Hill and the Rainier Valley; past and present."

   Others suggested <u>cultural artifacts, flags, quotes from various cultures, or even food from different cultures</u>:

   "inside school could have cultural artifacts, and outside the school could have paintings representing other cultures."

   "more student quotes or quotes from a diversity of famous people."

   "I think it can reflect cultural values and traditions of students by showing some things of their cultures and maybe it will feel good for students to know that their school values their culture and traditions."

   "It would be like each part of the building could be represented by a different culture, including artwork. I like how the roof walkway connecting the current 6th + 7th grade has different languages written all over, so I would really like something similar to that."

   "There could be flags hanging to represent that the school is inclusive in all cultures."

   "also serve cultural food in the cafeteria"

2. What types of spaces would make you feel safe? What would it look like? What would it feel like?

A lot of students suggested a small quiet space for time alone would make them feel safe:

"A time out area in a comfy corner of a room, where if you feel stressed out or you just need some time to calm yourself, you can ask your teacher if you can go to that space at like independent time and you can spend about 10 minutes there to calm down so you can come back and work/learn better."

"A rest area just to calm down."

"relaxing spaces in each classroom"

"there should be some areas where you can take a break if you need it, maybe if you don't feel comfortable there could be an area to zone out. It would feel like an area where you could just relax and let all of your worries go away!"

"One type of place that would make me safe is where I can be alone when I have a bad day…"

"A way that would make me feel safe is if it had a little room and if I have a bad day I can go in there."

"it would look like a comfortable place with pillows, bean bags, etc. The most important of all, it has to be a place where anyone could do anything safely."

"A quiet area or corner."

"Maybe add a little area in the corner of a room in each classroom…for whenever you felt upset or mad to calm down."

"A tiny corner that has pillows and earbuds."

"A comfortable reading area, that's quiet."

"A nice place to chill, like a place with bean bag chairs, or blankets. It would also have many of these areas, because if there was just one, everyone would go to it and it would be too crowded."

Alternatively, a space for a small group of friends would help:

"comfortable areas where people can just relax and hang out with their friends and just be calm."

"a space that has a feeling of comfort, peacefulness, calmness would probably make me feel safe."

"Nice corner to sit, relax, talk with friends."

"Maybe somewhere you could hang out with your friends when you feel kind of stressed or sad or something."

"A place in the back of the library where students can talk and hang out."

"A place where I can talk to the people that I trust. Somewhere it's quiet, and where I could do some calming activities. Somewhere you could make or listen to music."

Others suggested daylight, transparency and connecting to nature makes them feel safe:

"Maybe more windows in the building because I don't feel safe when it's just all lockers and lockers when walking down halls and if there is windows it could make the halls brighter."

"A cozy area with images of nature"

"A big cafeteria with big windows to look outside and enjoy the view"

"quiet space outside where there's nobody to distract you while you're focusing"

"For me it would probably be like a outside rock garden that's quiet and calm."

"More plants! Plants help freshen the air and would make me feel happier inside the school."

"Plants because they make people happy and calmer."

"A place outside with a bunch of trees closed off from people and very quiet.'

"A greenhouse or a community garden would be nice."

"Garden space: The garden would have benches and seating for students to hang out or meet. There would be plants and greenery to make it natural and safe feeling."

And adequate space for comfortable movement was on the minds of several students:

"The lunchroom would feel like not too packed with students."

"Maybe make the hallways bigger, because there's a lot of students and it's hard to get around sometimes."

"Spaces where you can easily move around in without feeling cramped. Relaxing areas all over the school with pillows, bean bags, blankets, plushies, and any other things that would help people feel comfortable; these in libraries would also feel nice"

3. How should outdoor learning spaces be used? What would it look like? What would it feel like?

Students had plenty of ideas for how these spaces could serve their needs:

"For small groups to do work outside"

"There can be a table for people who need to finish some homework. I think it should feel soothing and calm. With like an umbrella."

"I think it would be a great way to do history, a great place to do art, and maybe even writing. At my old school our teacher would take us outside and read to us there and that was pretty nice."

"an outdoor learning space could be for PE and for reading class so we could go outside and read independently when it's sunny and have read-aloud outside."

"they can be used for independent reading time or just a hang out area during lunch."

"we can use it to do independent work where we need to be quiet and it could have a place we can sit or lay down scrambled and not too close to each other"

"do class out there or lessons where it's spacious and quiet and there's comfortable seats and tables or you can sit in the grass."

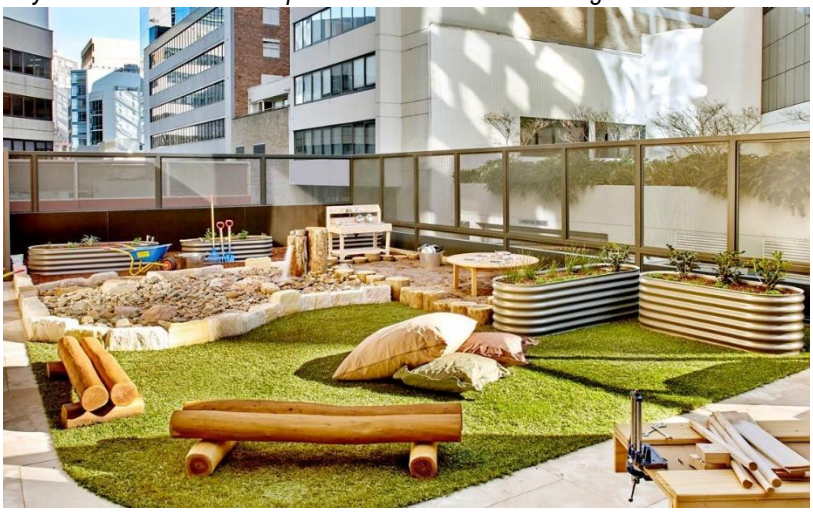
"Outdoor learning spaces would be used for relaxing and taking deep breaths during and after school."

"Maybe outdoor learning spaces should be used for reading, studying, and things like that. I would like it to have a safe, nice, relaxing vibe/feeling."

"Outdoor learning spaces can be used for art if it's a nice sunny day and you need inspiration."

"Maybe we could have a greenhouse to plant stuff!"

"they could be used as an optional cafeteria so kids can get fresh air"



"maybe like an outside eating area"

"More places to sit and hang out or relax, that has a cover so when it rains it doesn't get wet"

"they should be used with playing and maybe exercising…"

"I would like the outdoor to have sitting areas to eat at. And areas to play sports."
"A place to read and hang out with friends."

Students' suggestions for how they should look and feel included:

"I feel like the outdoor learning spaces should have comfortable chairs and maybe even hammocks!"

"Grassy and quiet, lots of space to move around in, places where kids would look forward to, comfortable sitting areas, plants."

"A few benches with a main platform at the center, surrounded by some sort of trees or flowers."

"open space with comfortable seating with sunny and shady spots."

"I would want the space to have plenty of comfortable seating for students to meet or have outdoor class. Maybe the space would have a small garden for certain classes to use."

"I think it would be cool to have a garden area with lunch tables to eat at."

"I would like an outdoor lunch area where there's some benches"

"Add chairs pillows and other things for comfort."

"rain shelters, benches, it would feel natural and comforting"

"benches with little shelter areas if it's raining or really sunny"

"a place with scattered benches, and lots of grass and flowers, not just concrete"

"a learning space with chairs and plants. Also a roof, it can keep us dry when it rains."

"It should have a lot of green plants and sitting places because a lot of people like the outdoors."

"There would be a mini garden of edible fruit or plants and there could be tables and seats."

"enough space for students to spread out. It should feel welcoming and peaceful…lots of greenery or nature lighting"

"I think the outdoor learning spaces should have some sort of covering so that if it rains people can still work there and keep their stuff dry."

"Maybe more color? It's fun to see new colors around the place."

What Do We Want?

Design Principles for Middle Schools

"**The environment should be as dynamic as the middle school student**.
They need light, bright, airy, room to move,
but also predictability, sensemaking, and stability."
- Chief Academic Officer Diane DeBacker

Design principles are statements that express the values and goals of the district for its capital projects. They serve to both inspire and guide design teams in formulating design concepts and in making decisions.

The district's design principles were developed in 2001 during a "transformation process for school design" that included educators, parents, community members, and architects. This group chose to "move away from the current paradigm, which suggests that all students learn the same things in the same way from the same people in the same place." Based upon the seven attributes of high achieving schools that had been identified through research funded by the Bill and Melinda Gates Foundation (see table below[1]), the planning group tailored the principles to fit the needs of Seattle Public Schools. Since that time, these principles have been used as the foundation for the SDAT Process as well as the district's Educational Specifications for Elementary, Middle, and High Schools.

Attributes of High Achieving Schools	Definition
Academic Rigor & High Expectations	All students achieve to standards within an academically rigorous curriculum. All students are challenged to grow and achieve to the maximum of their ability.
Effective Curriculum & Instruction	The school's programs are based on best practices and are tailored to individual student needs and skills. Learning opportunities are authentic and reflect real world situations.
Common Focus	Student learning is the focus of the school, and everyone in the school community articulates a shared vision that guides decisions.
Healthy, Supportive School Culture & Climate	The school is characterized by respect, open communication, celebration of diversity and inclusion. Students, their families and staff feel safe and cared for.
Small, Safe Personalized Learning Community	Each student is known and valued by the adults and other students in the school, and each student's social and academic needs are met.
Flexible Structure	The school community takes advantage of flexibility in building structure, as well as in time, space, and systems. The school's programs are tailored to individual student needs and skills and change as students change.

[1] School Design Process, Seattle School District, January 2002.

Learning Partnerships	With strong, mutually beneficial partnerships between the school and the community, everyone associated with the school, works collaboratively to realize students' hopes and dreams.

The group then worked to translate these attributes into themes and guiding principles that could be applied more directly to the design of learning environments. They arrived at the following summary principles,[2] each of which is supplemented by additional detail in the following sections:

Theme	Guiding Principle
Learner-Centered Environment	Student learning is at the heart of the school.
Aesthetics	The school is appealing, warm, and inviting to all, and reflects the school's values and focus.
Personalizing Environment	Each student is known well and cherished by adults and other students in the school.
Program Adaptability/Flexibility	The school's programs are tailored to individual student needs and talents and make use of a variety of learning tools.
Safety	Students are safe and cared for in all the important aspects of their lives.
Collaboration	Everyone associated with the school, works collaboratively to realize the school's hopes for students.
Community Connections	The community is involved, informed, and visible in promoting a rigorous academic learning environment, and in encouraging student use of community resources.

In the following sections, each of these themes is expanded and enhanced, and the themes of community and collaboration have been combined.

[2] Ibid, p. 9

The Learner-Centered Environment

"Elementary schools are prescriptive; **middle schools are the first time that students have a choice**."[1]
-Chief Academic Officer Diane DeBacker

"**Life is full of choices.** Prepare kids by giving them a say at school."[2]

As we reviewed in the section entitled "What Do We Know: Exemplary Schools for Young Adolescents," exemplary middle level schools are highly responsive to the unique characteristics of young adolescents. They emphasize providing for student voice and choice within the context of expectations for academic excellence. They advocate for a "learner-centered" environment.

We identified three nationally recognized frameworks that describe what a learner-centered middle school looks like.

1) This We Believe affirms that the successful middle school must be:

- **Developmentally Responsive**: *Using the distinctive nature and identities of young adolescents as the foundation* upon which all decisions about school are made.
- **Challenging:** Cultivating high expectations and advancing learning for every member of the school community.
- **Empowering:** Facilitating environments in which *students take responsibility for their own learning and contribute positively to the world* around them.
- **Equitable:** Providing socially just learning opportunities and environments for every student.
- **Engaging:** Fostering a learning atmosphere that is *relevant, participatory, and motivating* for all learners.[3]

2) Similarly, the National Association to Accelerate Middle Grades Reform's Rubric on "Schools to Watch" notes that high-performing middle schools exhibit these learner-focused characteristics[4]:

- The curriculum is both socially significant and relevant to the personal and career interests of young adolescents.
- Students are provided the time, and the support they need to meet rigorous academic standards.
- The staff creates a personalized environment that supports each student's intellectual, ethical, social, and physical development.
- All teachers foster curiosity, creativity, and the development of social skills in a structured and supportive environment.
- Teachers use an interdisciplinary approach to reinforce important concepts, skills, and address real-world problems. Students are provided multiple opportunities to explore a rich variety of topics and interests to develop their identity, learn about their strengths, discover, and demonstrate their own competence, and plan for their future.
- Students have opportunities for voice - posing questions, reflecting on experiences, and participating in decisions and leadership activities.
- Staff members provide all students with opportunities to develop citizenship skills, to use the community as a classroom, and to engage the community in providing resources and support.
- The school provides age-appropriate, co-curricular activities to foster social skills and character, and to develop interests beyond the classroom environment.
- Students are provided the opportunity to use many and varied approaches to achieve and demonstrate competence and mastery of standards.

[1] Chief Academic Officer Diane DeBacker, Middle School Ed Specs Meeting, April 22, 2019.
[2] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning; OWP/P, 2010, p. 103.
[3] "The Successful Middle School: This We Believe"; AMLE, Attributes and Characteristics at www.amle.org/wp-content/uploads/2021/01/b AMLE_Position_Paper_Comparison.pdf, accessed March 2021.
[4] National Forum to Accelerate Middle Grades Reform, "Schools to Watch Rubric", available at middlegradesreform.org, 2021.

3) And we find that a third framework from the International Society for Technology in Education (ISTE), while focused on technology for learning, paints a clear picture of what a student-driven process looks like:[5]

Empowered Learner: Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

Digital Citizen: Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

Innovative Designer: Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.

Computational Thinker: Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

When the focus is shifted to how students can lead their own learning rather than being dependent on teachers, the entire school and site can be reconceived as a richly textured, holistic educational environment that supports and inspires a culture of learning. As noted by Vicki Abeles in her book Beyond Measure:

"We must…frame learning as a rich and varied experience, not a transactional equation. Ultimately, a school focused on learning…would grow the kind of inventive thinkers and keen communicators that our children's future will demand."

[5] Student Standards, International Society for Technology in Education (ISTE), https://www.iste.org/standards/for-students, accessed March 2021.

SPS Design Principles

"**Multiply intelligences:** Allow students time and space to choose what they want to do—their choices will illuminate their strengths."[6]

"**Emulate museums**. An environment rich in evocative objects – whether it's a classroom or a museum – triggers active learning by letting students pick what to engage with."[7]

SPS' longstanding design principles, included in previous versions of Educational Specifications for Middle Schools[8,9], articulate how building design can begin to support a Learner-Centered Environment.

- **The building is designed with students' needs placed first.**
- **The building and campus provide opportunities for students to explore hypotheses and test ideas.**
- **The building provides spaces for interdisciplinary learning to occur, as well as spaces for teachers to collaborate.**
- **The building provides spaces for student work to be prominently displayed throughout the school.**
- **The building provides access and space for parents and community members to collaborate meaningfully as learning partners.**

In addition to the above, we propose the following Design Principles to enhance the focus on the student as learner:

- **As the information hub that can support all types of student-led learning, the library shall be designed as a visually open and highly flexible academic heart.**
- **Provide a richly textured environment with a variety of indoor and outdoor spaces for small group activities.**
- **Provide plenty of visual display surfaces in all spaces where students might work in small groups.**
    - Provide wall-mounted, table-top, or mobile markerboards in each teaching station, learning commons, or small group collaboration room, sufficient to serve all small groups that might work in that space.
    - Provide an electronic display for student use in each learning commons or small group collaboration room.
- **Provide movable furnishings** scaled to serve groups of two, four or six, within each teaching station, learning commons, or small group collaboration room.

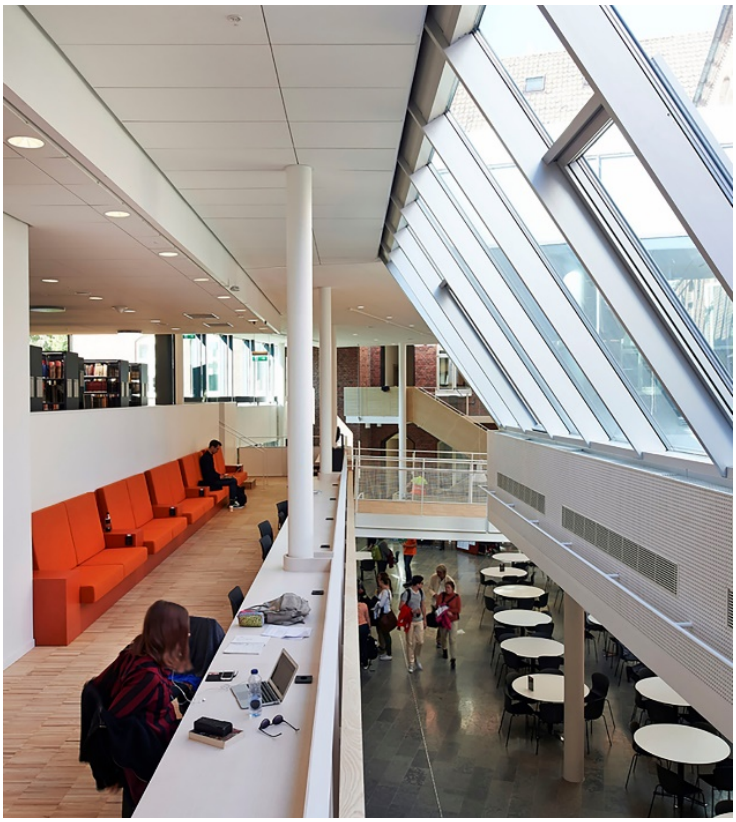
[6] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 67.
[7] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 67.
[8] Madison Middle School Educational Specifications, Seattle Public Schools, 2002, pp. 10-12.
[9] Generic Educational Specification for Middle Schools, Seattle Public schools, December 2011.

Aesthetics

"As designers, we love to use **transparency** as a means to inspire students, to let them know what's going on in other spaces and programs. **It's about creating connections,** either visually through glass, or spatially via horizontal and vertical connections." – School design architect

"**We are so biologically wired to embrace the natural world** that, in addition to greenery and light, we respond strongly to natural materials, biomorphic forms, and specific topographical features."[10]

We believe paying attention to aesthetics is learner-centered because there are so many cold hard-surfaced, uninviting schools in this country for whom it appears the primary client was the custodian. Durability does not have to be ugly.



In the section entitled "What Do We Know: Environmental Conditions Critical for Learning," we share research findings on qualities that are often considered merely aesthetic but have been demonstrated to affect student performance: daylighting, views, acoustics, and even biophilia.

While it may seem that aesthetics is a matter of personal taste, there is widespread agreement on many architectural qualities that enhance the experience for everyone within the school environment. The aesthetics of the school have a significant impact on setting the stage for learning; the student's perception of a school's "value" is inextricably tied to the spatial and material qualities of the building. Visual qualities such as transparency, for example, can both enhance safety and build community.

Given the amount of time students spend inside the building, their experience of proper proportion and scale, ample daylight, tactile materials and evocative but pleasing colors can instill a sense of comfort, connection, and pride. The following aesthetic priorities were identified in 2002, and still ring true today:

- **The building is appealing, warm, and inviting.**
- **The building has comfortable, fun spaces that entice kids.**
- **The building has a variety of interesting spatial types that allow for exploration.**
- **The building provides a stimulating environment and is pleasing in a tactile way.**
- **The building conveys a sense of place.**[11]

[10] Goldhagen, Sarah Williams, Welcome to Your World: How the Built Environment Shapes Our Lives, 2017, p. 147.
[11] Design criteria from SPS Generic Educational Specifications for Middle Schools, December 2011, p. 6.

Neighborhoods for Teaming

"The **interdisciplinary team** of two or more teachers working with a common group of students in a block of time is the signature component of high-performing schools, **literally the heart of the school from which other desirable programs and experiences evolve**."[1]

"**Unite the disciplines**: Art and science need each other. Discoveries -- great and small -- happen when the two come together; so give students places for cross-disciplinary work, and who knows what creative genius will flourish."[2]

While current practice in schools involves interdisciplinary integration among sub-disciplines such as social studies (history, geography, economics, and government), or biology and chemistry in environmental science, integration across disciplines appears to have been the exception rather than the rule. It is apparent from a reading of recently adopted standards that increasing integration across disciplines is intended to make learning more relevant, real-world, and connected to students' interests and future careers.

Some examples include:

- Traditionally English/Language Arts has been taught using what was the canonical Western Literature. The recently adopted Common Core standards for English/Language Arts "establish guidelines for literacy in history/social studies, science, and technical subjects. Because students must learn to read, write, speak, listen, and use language effectively in a variety of content areas, the standards promote the literacy skills and concepts required for college and career readiness in multiple disciplines."[3]
- Science and Engineering are Integrated in the NextGen Science Standards, from K–12.
    - A significant difference in the Next Generation Science Standards (NGSS) is the integration of engineering and technology into the structure of science education. This integration is achieved "by raising engineering design to the same level as scientific inquiry in classroom instruction when teaching science disciplines at all levels and by giving core ideas of engineering and technology the same status as those in other major science disciplines."[4]
    - The practice of engineering requires use of computational thinking and modeling that demands that mathematics are no longer learned in isolation from the sciences.
    - The "Cross-Cutting Concepts" that are a key component of the NGSS are by nature interdisciplinary: patterns, systems models, stability, and change, are all ideas applicable across a variety of disciplines.
- From the Seattle K-12 Arts Plan: "All schools will rely on core arts classes, integrated arts instruction, and school-community arts partnerships with teaching artists and community arts organizations to engage students, deepen learning in all subjects, and prepare students for participation in the creative, innovation-based economy of Seattle.

This trend in integration across disciplines is consistent with recommendations made by the National Association of Secondary School Principals in its 2006 publication Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform. One of its key recommendations related to Curriculum, Instruction and Assessment is:

> "The school will reorganize the traditional department (content area) structure and foster the use of teacher teams provided with ample common planning time to integrate the school's curriculum to the extent possible and emphasize depth over breadth of coverage."[5]

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[1] "This We Believe: Keys to Educating Young Adolescents," Association for Middle Level Education, 2010, p. 31.
[2] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 73.
[3] "Common Core State Standards for English/Language Arts", http://www.corestandards.org/ELA-Literacy/.
[4] Excerpted from NGSS Release "Appendix A – Conceptual Shifts in the Next Generation Science Standards", April 2013.
[5] Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform; National Association of Secondary School Principals, 2006, p. 201.

Further, "the varied learning and teaching approaches in effective middle grades classrooms are often characterized by an inquiry-oriented, problem-based framework that calls for interdisciplinary, student-centered lessons grounded in real-world issues."[6]

And, as noted in the lead-in quote above, the Association for Middle Level Education identifies the interdisciplinary team as the signature component of high-performing schools.

Even if current middle schools are not utilizing this best practice, the sizable long-term investment in capital facilities demands that buildings be organized to support it, particularly if sufficient flexibility can be provided so that other models can work as well. The post-occupancy evaluations of recent SPS middle schools noted that organizing the buildings into interdisciplinary neighborhoods is strongly preferred by principals.

Breaking Down the Scale Supports Personalization

There are benefits for middle schools to be as large as 1,000 students:

- When the student population is large enough, a variety of courses such as band, orchestra, and CTE can be offered.
- There are also economic reasons to create large schools, as administrative "overhead" per student is reduced.
- The cost of providing the full range of facilities and fields can be justified.

But with larger enrollments, the number of people that each person encounters each day grows beyond that with which anyone can form meaningful relationships. And if not thoughtfully scaled, the school building can feel impersonal and institutional.

A variety of teaming models have attempted to address this concern. While no single model fits every school, schools should be organized in smaller neighborhoods where students and staff can know each other. Therefore, academic neighborhoods are proposed to consist of general academic and support spaces, along with select specialized spaces. With proper scheduling, students can spend much of their day within their neighborhood, interacting and developing relationships with a smaller, more comprehensible number of people, thus increasing opportunities for connection and personalization. Reducing the need to move as often or as far during passing periods can reduce disruption and create an environment that is calmer and more focused.

> "**Slow the pace**: Alcoves and furniture in hallways discourage high-speed traffic and create places of pause."[7]

So, what size should these "neighborhoods" be?

Oxford Professor of Evolutionary Psychology Robin Dunbar has written that the:

> "quantitative relationship between social-group size and neocortex volume... predicts a group size of approximately 150 for humans, which turns out to be the typical size of both social communities in small-scale societies and personal social networks in the modern world. This constraint on the size of social groups is partly cognitive and partly temporal. It gives rise to a layered structure in primate and human social groups that, in humans, reflects both emotional closeness in relationships and the frequency of contact. These findings have potentially important implications for the way in which human organizations are structured."[8]

This suggests that the size of neighborhoods that would support the development of meaningful relationships among students and staff is approximately 150 students. Recognizing that the number of students per typical lab or classroom will average approximately 30, it is recommended that classrooms and labs be clustered to create spatial boundaries around groups of students in the range of 150, or ~6 "teaching stations."

Sizing neighborhoods to acknowledge this cognitive and temporal limit will create a more comfortable, less institutional environment.

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[6] "This We Believe: Keys to Educating Young Adolescents," Association for Middle Level Education, 2010, p. 47.
[7] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 161.
[8] Dunbar, R.I.M, from the abstract for "The Social Brain: Pscyhological Underpinnings and Implications for the Structure of Organizations", University of Oxford Medical Sciences Division, http://www.psy.ox.ac.uk/publications/463013, 2014.

It should be noted that the SPS Educational Specifications for elementary and high schools also recommend similarly sized neighborhoods of classrooms, and post-occupancy evaluations of those schools have not reported negative feedback regarding the organization of classrooms.

Neighborhoods also support flexibility of building use. It is recommended that, when feasible, at least one neighborhood accessible from the main entry have independent zoning for HVAC and other systems so that it may be used for after-hours and summer programs.

SPS Design Principles

Seattle Public Schools longstanding design principles, included in previous versions of Educational Specifications for Middle Schools[9,10], articulate more specifically how building design should support interdisciplinary instruction as well as exploration of real-world problems:

- **The building provides spaces for interdisciplinary learning to occur, as well as spaces for teachers to collaborate.**
- **Flexibility in building design makes it possible to offer a wide variety of interdisciplinary educational programs.**

[9] Madison Middle School Educational Specifications, Seattle Public Schools, 2002, pp. 10-12.
[10] Generic Educational Specification for Middle Schools, Seattle Public schools, December 2011, 1-6 & 1-7.

Making It Personal

"If we **know every student by story, strength, and need, we can then tailor our academic and behavioral approaches to ensure every student graduates prepared to succeed** in Seattle."[1]
~ Wyeth Jessee,Chief of Schools and Continuous Improvement

"…**learning is ultimately about relationships** -- about making connections among people, places, resources, and ideas. Our young people's ability to make connections will literally shape their place on the global stage."[2]

Nearly every person carries with them a story of a teacher who made a difference in their life. Now ask any teacher why he or she entered the profession, and the most frequent answer is: "To make a difference in the lives of young people."

Research shows that one of the most important factors behind student success, especially that of disadvantaged students, is a close connection with at least one adult who demonstrates caring and concern for the student's advancement.[3]

One of the biggest challenges faced by both students and educators is how to establish and maintain personal relationships with each other. For these relationships to be successful, they require an academic program that can respond, support, and challenge each student as an individual, while simultaneously connecting them to the whole of the school community.

The National Association of Secondary School Principals has identified a set of practices associated with personalization. According to their publication "Breaking Ranks in the Middle" - Implementing structural changes to foster these practices provides the "shell" in which productive interaction -- relationships -- can occur systematically.[4]

Not all the practices have implications for the design of school buildings, but for those that do, we have made recommendations for how the physical environment can support them and have included these recommendations in the "What Do We Do" sections of these Educational Specifications. Recommendations **noted in bold font** have been included in the SPS Design Principles for Middle School Ed Specs since 2002.

Practices Associated with Personalization[5]	**Physical Environment Recommendations**
Create structures so that students cannot remain anonymous.	▪ Break down the scale of the large 1,000-student school into smaller groupings of classrooms so that teams of teachers can work with a single cohort of students, and students and teachers can know each other well. (See discussion in section on "Academic Neighborhoods.")

[1] SPS website > Departments > Schools and Continuous Improvement > Multi-Tiered System of Support
[2] Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform; National Association of Secondary School Principals, 2006, p. ix.
[3] Introduction to the Personalization Workshops, "Changing Systems to Personalize Learning," The Education Alliance at Brown University, 2003, p. 35.
[4] Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform; National Association of Secondary School Principals
[5] Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform; National Association of Secondary School Principals, 2006, p. 129.

Establish schedules and priorities that allow teachers to develop an appreciation for each student's abilities.	
Create structures in which the aspirations, strengths, weaknesses, interests, and level of progress of each student are known well by at least one adult.	▪ Provide plenty of informal meeting spaces where students and adults can interact one-on-one or in small groups. ▪ Physically locate the grade-level administrators and counselors near the places where students spend most of their day. ▪ **Provides spaces for students to develop personalized relationships with adults.**
Provide opportunities for students to learn about the values associated with life in a civil and democratic society, their responsibilities within that society, and how to exercise those values in a school.	▪ Integrate expressions of the school's mission, goals, and values at key entryways, and provide plenty of places to display positive messages throughout the physical environment.
Offer parents, families, and community members opportunities for involvement in students' education.	▪ Provide a family engagement room and support spaces that expand the school-family relationship. ▪ Provide office and meeting spaces to support community partnerships and to allow community members to mentor students.
Ensure that the physical and mental health needs of students are addressed.	▪ Enhance the kitchen servery so that all students who are eligible for free-and-reduced price meals can be served within the scheduled lunch period. ▪ Provide options for grab-and-go meals so that more students participate in school meals. ▪ Make the student dining commons comfortable and attractive for all kids so there is no stigma in eating school lunch. ▪ Provide adequate space for student services such as speech, occupational, and physical therapy, drug and alcohol counseling, and a variety of Special Education services. ▪ Provide space for a student-based health center even if funding for services is not yet assured. ▪ **Provides spaces for individualized support services for students, including mental, physical, social, and academic support.**
Provide students with opportunities to demonstrate their academic, athletic, musical, dramatic, and other accomplishments in a variety of ways.	▪ **Provide spaces to support a wide range of academic subjects and learning opportunities.** ▪ Provide sound and lighting systems in the Dining Commons to support large-group performances. ▪ Provide places for informal and celebratory individual and small-group demonstrations of performance, such as the Learning Commons, an outdoor amphitheater, or other areas where small-scale demonstrations can occur.
Offer opportunities to develop social, decision-making, and communication skills.	▪ Integrate small- and medium-scale group spaces within the school so that students can work with their peers on decision making and communication skills outside of the traditional classroom. ▪ **Provide spaces for students to work and socialize with peers.**

Make Spaces Where Students Feel Comfortable

"…everything that is known about the nature of young adolescents and the principles of learning points to the reality that the most successful learning strategies are ones that involve each student personally."[6]

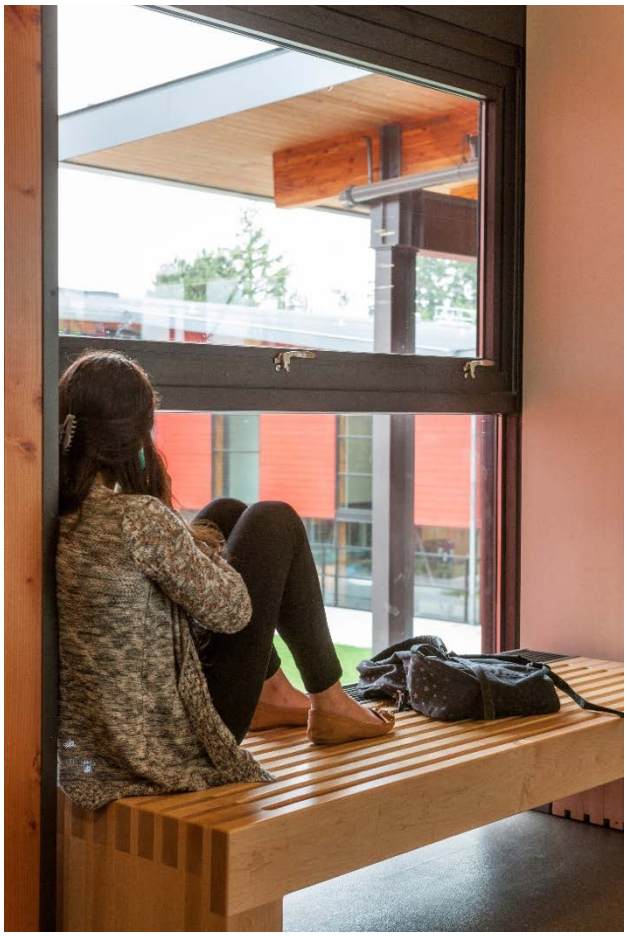
"A time out area in a comfy corner of a room, where if you feel stressed out or you just need some time to calm yourself, you can ask your teacher if you can go to that space at like independent time and you can spend about 10 minutes there to calm down so you can come back and work/learn better."[7]

"Maybe somewhere you could hang out with your friends when you feel kind of stressed or sad or something."[8]

"Comfortable areas where people can just relax and hang out with their friends and just be calm."[9]

"For me it would probably be like an outside rock garden that's quiet and calm."[10]

Spaces for peer-to-peer interactions can also play an important role in student learning.



Informal, Intimate Spaces

Not everyone wants a big, loud, open space. Niches, benches, and other small-scale spaces can invite students to have conversations with one or two of their peers, or to simply read and reflect; these are important elements to make a large school feel personal -- like it's designed to fit the needs of individuals. We have recommended more generous areas for circulation space to allow for creating these "eddies" in the streams of students passing through the hallways, and we encourage design teams to create these smaller spaces wherever they can still be seen and supervised.

Small Group Meeting Areas

To encourage a climate of personalized, student-led learning, small group collaboration areas should be distributed among classrooms in the Academic Neighborhoods and along main hallways. They should be placed in highly visible areas where they are accessible for student use and should be designed with lots of glazing so that students can work while remaining visible. Prominent locations and generous glazing will also reduce the chance these spaces will be re- appropriated as offices for adults.

[6] This We Believe: Keys to Educating Young Adolescents. Association for Middle Level Education (AMLE), 2010, p. 16.
[7] Mercer Middle School student, in response to "What Types of Spaces Would Make You Feel Safe?" Design Workshop, March 2021.
[8] Ibid.
[9] Ibid.
[10] Ibid.

Safety in the Midst of Transparency

"A big cafeteria with big windows to look outside and enjoy the view."

"Maybe more windows in the building because I don't feel safe when it's just all lockers and lockers when walking down halls and if there is windows it could make the halls brighter."

"A place where I can talk to the people that I trust. Somewhere it's quiet, and where I could do some calming activities."

"I would see people welcoming me in when I first enter school. I would see people socializing, talking to one another. I would see diverse people, different skin colors, different sexuality, different ethnicity. It would feel as if I was at home, safe and sound with no worries."

- Mercer Middle School Students, in response to question "What types of spaces would make you feel safe?" Design Workshop, March 2021

It is a conundrum: we want our schools to be **light-filled and open, warm, and welcoming to all**, and yet they must **keep intruders at bay and provide protection** when someone threatens harm.

Many conversations with educators center around fostering a vibrant culture of inspiration where activities are visible and student work is celebrated, where social connections are created and the sense of caring is palpable. The physical environment does not just create safety from external threats….it can support a positive school culture by helping to establish boundaries for behavior.

Culture, Connection and Scale: Building Awareness

There are a variety of ways that the design of the building and site can influence how people interact. The value of physical transparency has been expressed repeatedly as a means of sustaining connections between students, staff, and the community. Visibility of activities inspires shared learning, and it also makes the school a safer place to be, when students and staff can see who is entering and what is happening outside.

In Visioning workshops with SPS educators, parents, and community members convened in support of the High School Educational Specifications, there was consensus about these means of conferring a sense of safety and security. We find no reason these principles would not apply to middle schools as well. Quotes from Visioning Workshop participants include:

> *"I'll offer a couple of words: **the entry should be 'layered',** both from the perspective of safety and security, but also to **enhance the sense of arrival**. And it rains here, so it should provide shelter where you can be protected while waiting for pickup. And it should be expressive of the beacon, i.e. **soft and warm**."*
>
> *"A school that looks vibrant, activities are happening and are visible. The day is extended into the afternoon and evening, and the **visibility of those activities contributes to sustaining community, as well as to safety and security**. In our old building, after hours activities would occur in a closed-off room down a closed-off hall and it felt isolating and scary. Now that we (have transparency and) are able to see, the building provides a sense of support for our school community."*
>
> *"…**having the students know what's happening is an important element of security**. Though we should always have a controlled entrance to the building. If everyone can see who and what's coming, that's their first opportunity to stop anything threatening. How do you make that welcoming but also safe and secure?"*

"It's always a temptation to build a fortress instead of a community space. The best way to counteract that is to build a space that feels like a community, where kids are collaborating on their own time, where adults can get to know kids, and where there are activities all of the time. How do we bring in the disenfranchised kid? Because that's the one who will become dangerous later. At the heart of it all, it should be 'COMMUNITY FIRST'. ***Fundamentally a space that builds community is more important than locks and traps to get through****."*

"In my experience, there are two levels of security. One is the stuff, like locks and cameras. The other is the people; are we comfortable in our space? We need to make spaces where kids feel comfortable; otherwise all the bells and whistles will just make them feel like they're in prison. If we know one another we are a lot safer; ***when we have EYES on the street, then we understand who's intruding and who is not****."*

"Safety and security and health and wellbeing are intimately connected and ***we have to do a better job of making sure that every young person is well-known, is cared for, & has friends or colleagues surrounding him or her****."*

SPS Design Principles

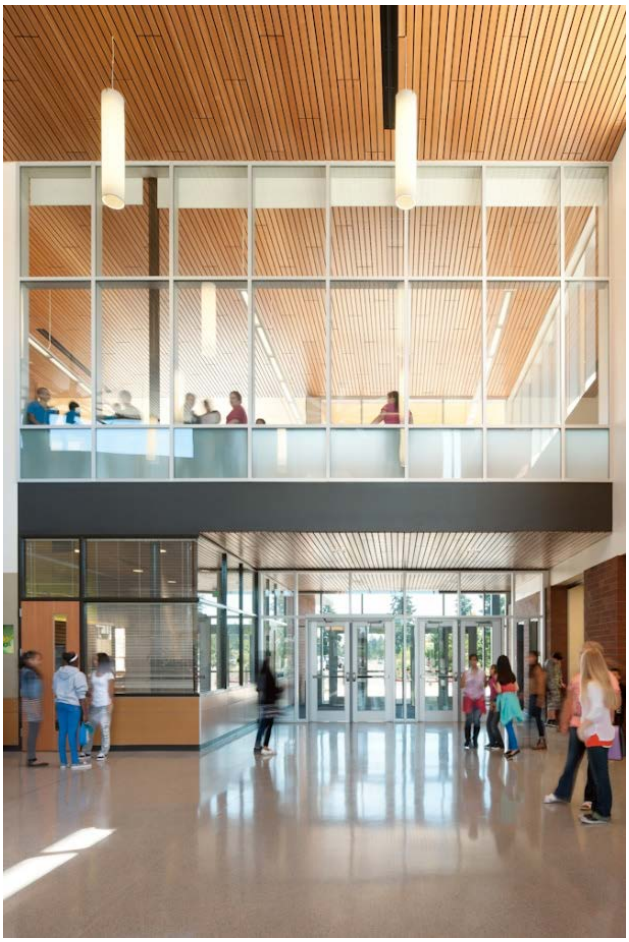
- **The school should:**
  - **be a welcoming beacon with an entry directly connected to the main office;**
  - **provide a sense of orientation and wayfinding; and**
  - **express the culture and values of its community.**
- **Provide transparency inside and out** for "eyes on the street" as well as visibility of activities, which increases security and contributes to community.
- **Zone the building with layers of protection.**

The reality is that there is a tension between that transparency and the need for establishing boundaries. Well-known principles of Crime Prevention Through Environmental Design (CPTED) help to address this tension.

Crime Prevention Through Environmental Design (CPTED)

Seattle Public Schools advocates the use of principles of Crime Prevention Through Environmental Design (CPTED). The following CPTED principles are adapted from the Centers for Disease Control & Prevention "Violence Prevention" Guidelines.

1. **Natural surveillance** refers to the placement of physical features that maximize visibility. Example: The strategic use of windows that look out on the school entrance so that students can see into the school and know that others can see them.
2. **Access management** involves guiding people by using signs, well-marked entrances and exits, and landscaping. It may also include limiting access to certain areas by using real or symbolic barriers. Example: Landscaping that reduces access to unsupervised locations on the school grounds.
3. **Territoriality** is defined by a clear delineation of space, expressions of pride or ownership, and the creation of a welcoming environment. Example: Motivational signs, displays of student art, and the use of school colors to create warmth and express pride.
4. **Physical maintenance** includes repair and general upkeep of space. Example: Removing graffiti in restrooms in a timely manner and making the necessary repairs to restrooms, light fixtures, and stairways to maintain safety and comfort.
5. **Order maintenance** involves attending to minor unacceptable acts and providing measures that clearly state acceptable behavior. Example: Maintaining an obvious adult presence during all times that students transition from one location to another.



Refer to section "What Do We Do – Safety, Security & Risk Management" for specific means for integrating these principles into the design of secondary schools.

Flexible Facilities

"**The most fundamental structures in our schools are often inhibitors to progress**:
our schedules, our physical spaces, the grouping patterns of learners,
and the configuration of the personnel." – Heidi Hayes Jacobs[1]

When designing a facility with an intended life of 50+ years, an integrated design approach, which thoughtfully and fully engages questions of time, usage, and adaptability, is required.

Context and Importance

Seattle Public Schools has over 30 historical landmarked schools. Approximately 30% of all past projects constructed by the district have been landmarked. This is an indicator that a significant proportion of our school facilities has established a meaningful place within the city and has become an important cultural and social asset. As the district continues to invest in quality and lasting school facilities, this trend can be expected to continue. This elevates the importance of flexibility and adaptability as a key design consideration.

In addition to the enduring cultural impact that schools have within the city, the environmental impact of schools is directly related to how flexible and adaptable they are over a given life span. Flexibility is directly connected to environmental performance in both daily operations and long-term impact.

Flexible facilities should support a variety of learning and community activities, and also accommodate changes in demographics, community needs, or policy priorities. The biggest challenge will be to anticipate needs of the future while meeting the challenges and perspectives of today.

Learning Environments, Curriculum, and Pedagogy

Middle school students should be provided with learning environments that accommodate the range of developmental levels of students at this age. Spaces should be designed to support exploration and activities that stimulate and nurture problem-solving skills, reflective-thinking processes, and awareness of the learning environment around them.[2] They should be multi-modal to accommodate a dynamic range of pedagogies such as 360-degree math sessions, project based learning, peer-to-peer learning, performative learning, and other modes that are critical to middle school age learners.

Flexible facility design should:

- Provide space sizes, types, resources, and configurations that support a variety of learning modes and activities.
- Accommodate individual work, small groups/teams, and larger groups.
- Provide spaces, such as enclosed small group collaboration rooms and open learning commons, that allow for student-generated activities and levels of autonomy while retaining visibility.
- Use mobile elements that allow for easy reconfiguration and re-grouping.

Teaching and Learning resources should not be solely centered and fixed at the 'front' of an individual classroom; distribute resources such as writable surfaces (horizontal and vertical), display surfaces, technology, and power throughout the classroom, the learning commons, meeting areas, and circulation nodes throughout the school.

Several spaces outside the classroom should provide for collaborative learning. These should include[3]:

- Labs/studios with abundant daylight, flexible furniture, and space for group projects.
- Open areas such as atriums and learning streets – instead of corridors – to encourage social interaction.
- Project rooms with high ceilings, worktables, and specialized equipment for inventing, creating, and building.

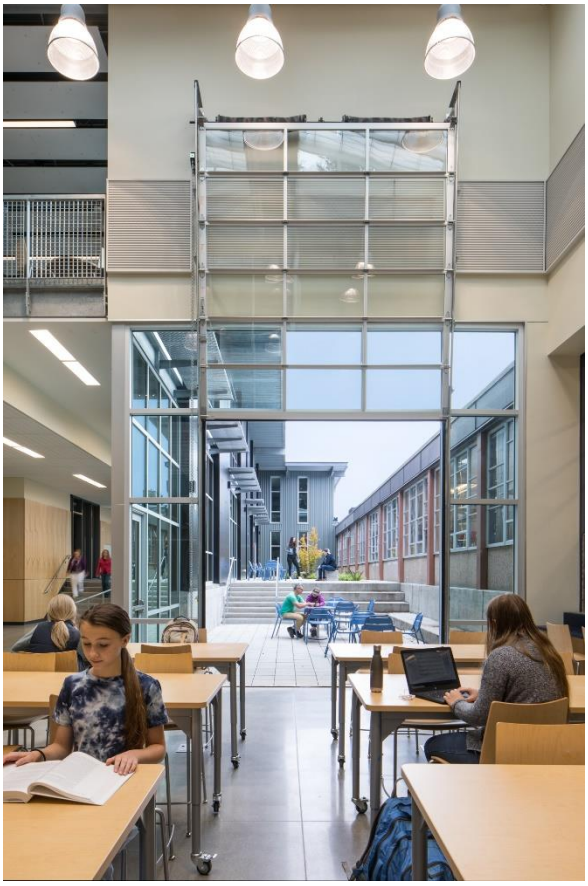
[1] Mehrbach & Beingessner, "Why Flexible Learning Environments?", August 2018
[2] Wiles, Essential Middle School, 78
[3] Hanover Research, "School Structures that Support 21st Century Learning", 10

Flexibility Strategies – Passive and Active

"**Make classrooms agile**. A learning space that can be reconfigured on a dime will engage different kinds of learners and teachers."[4]

Time Period of Use

Where feasible, assume that spaces can flex in program and use throughout the day, week, semester, and year. Spaces that provide for time-share uses allow different user-groups to access the same space, different curriculum or activities to be engaged. Time-share concepts are particularly effective in spaces used by neighborhood and community groups.



Multiple Function Space

A particular activity may only need to occur in a space over a portion of a day or week. Also, in larger spaces, a particular activity may best be supported by a smaller area within the larger space. Creating smaller scaled 'shoulder' spaces within larger multi-function spaces builds in inherit flexibility; examples include break out spaces, presentation spaces, digital resource areas, display areas, or small conversation groupings.

Moveable Components

Movable architectural elements and furnishings allow users to modify or combine spaces for varied learning configurations. Ease of use, durability, and reliability should be prioritized.

Adaptable Elements

Elements such as demountable walls may need the efforts of building maintenance or staff to change, but provide for seasonal, annual, or evolutionary adaptations such as team teaching, cross curriculum projects, seasonal collaboration projects, or similar.

Renovation

Renovation is a relatively high-cost strategy that requires significant reinvestment. Create the capacity for renovation through the selection of materials, systems, and organizational approaches that make renovation more feasible. The potential for change should be considered in material and system selections.

Conversion

Consideration should be given to construction types, floor heights, and structural spacing that allow portions of a building to be converted to other uses. This might pertain to demographic trends that compel the district to consider joint use of the facility with other organizations such as libraries, community resource centers, or other uses.

Expansion

Population and student growth is not fixed or linear. It is likely that during the life of a middle school facility that it will need expansion or renovation to accommodate growth. Site and building layout should consider area(s) for future permanent or temporary additions that are compatible with the existing site plans for student activities and supervision. Utilities to serve the expansion area(s) should be planned to the extent feasible so that capacity is provided to accommodate potential growth.

[4] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 89.

Design Principles

- **School and classroom design should accommodate diverse learning needs. Spaces should be easily reconfigurable to allow multiple learning activities to occur.**
- **Space should be designed in anticipation of evolving learning needs, as both student populations and the relevance of specific subjects and pedagogy change over time.**
- **Flexible learning spaces allow for interactions and collaborative work, which are fundamental to the development of student skills and knowledge. These types of spaces support leadership, communication, teamwork, and social emotional growth.**
- **Building Systems and Infrastructure should accommodate change throughout intended life of the building.**
- **Spaces throughout the facility should be thought of in how they support the primary use but also accommodate secondary and tertiary uses.**

Scenario Planning

The following specific scenarios are to be developed as planning level diagrams for district review at Schematic and Design Development phases to evaluate proposed strategies for flexibility.

5-20-50 Year Organizational and Systems Selection Approach

Over the lifespan of the facility the District will need to understand how the building is able to adapt to changing needs. Show the effect that proposed structural supports, wall types, systems integration, and intended use will have on expected longevity.

Structural system selection and design should consider impacts related to facility flexibility. Unlimited flexibility is typically not economically feasible nor the intent of this requirement. In conjunction with scenario level planning outlined previously the design team is to consider the effect of shear wall, braced frame, anchoring, and other similar component placement as they relate to both initial cost and long-term facility flexibility and adaptability.

The scenario plan and diagrams are to clearly indicate a range of 3 wall types, from easily adaptable to those requiring significant infrastructure modifications.

> 5 year – Non-load bearing or lateral force walls with minimal to no systems infrastructure. These walls would be likely to be modified through the life of the facility, so that could be easily done with minimal impact on systems or structure.
>
> 20 year – Non-load bearing or lateral force walls with some degree of systems infrastructure contained or routed within. These locations would likely be modified one or two times during the facility lifespan, so locations should designed to be remodeled or removed to facilitate future building expansions.
>
> 50 year – Load bearing and lateral force walls, likely not modified for the intended lifespan of the building, such as exterior walls not associated with intended facility expansion areas, and seismic, fire, or similar building separation walls. These locations would contain significant systems infrastructure, particularly trunk lines, or support core infrastructure uses such as an MDF.

To achieve coordinated building and system integration through the intended lifespan of the facility electrical, mechanical, technology, environmental, and structural systems should be selected, designed, and coordinated within this framework.

Student Demographic Shifts

Demographic shifts are known to cause larger than average grade bands that move through a school during a given year or series of years. (i.e., a student cohort that needs to accommodate 20-30 more students of a particular grade band as they move through their years at the middle school). Show diagrammatically how the spatial organization can accommodate demographic shifts in the number of students in a particular grade band.

Core School Resources

Core school resource spaces are often located centrally in the school, and often lack the ability to expand alongside enrollment expansions. Provide scenario level planning to show how existing areas such as administration, the student commons, and the

library could be expanded within the context of classroom expansion. Also show how locations of corridors, stairs, exits and elevators would accommodate additional capacity.

Core Learning Environments

Provide scenario level planning to show how core learning environments could be expanded to accommodate an additional 150 students. Diagram (2) potential paths:

- A rapid temporary expansion using modular buildings for 6 classrooms; diagram should indicate space on site and utilities routing.
- Long term expansion to the proposed/existing building to accommodate 6 classrooms and associated support and resources spaces (one academic neighborhood).

Operations

Middle schools must accommodate various after school academic, athletic, performing arts, community resource and community gathering activities. These uses may be complementary or in conflict with each other with regards to circulation, security, and access. The facility should be configurable into secured zones to support after hours activities. Provide scenario level planning to illustrate the school and site zoning and access design and intended operations. Security systems, doors and hardware configurations should support the agreed-upon zoning and operation plan.

Infrastructure & Systems Planning

Flexible facility design also pertains to overall building organization, system configuration and design, and infrastructure.

Core Building System and Resource Space Location and Planning

Core building system and resource spaces should be designed to minimize impacts from future growth, expansion, or reconfiguration of school. These types of spaces are typically high-cost spaces and difficult to relocate or reconfigure. The design team should provide scenario level planning in early design phases to best understand potential growth and expansion needs. Then spaces such as electrical service rooms, mechanical rooms, larger restrooms, or other similar building system spaces should be located to best facilitate the approved scenarios.

Building Systems, Infrastructure, and Controls

Building systems and infrastructure should be considered in the context of facility flexibility, both in daily use and long-term scenario level planning.

- Locations of system trunk lines should be considered in the context of their service access needs over their lifespan. (i.e. technology infrastructure in need of continual enhancement vs an air duct that needs little attention or inspection.)
- System design should corollate to and support the 5-20-50 Year Organizational and Systems Selection Approach.
- Controls and system performance/adjustments must support moveable component and adaptable element strategies outlined above.

Technology

Planning for technology is an ongoing process and an important part of facility flexibility. Technology includes adequate power, circuits and switching, pathways, lighting, and heating, ventilation, and air-conditioning. Flexible technology planning should prioritize interoperability, ease of access and upgrading, capacity, security, and robustness. (See SPS Technical Building Standards).

Enduring Quality and Durability

Materials

Architectural finishes and building material selections should support flexibility and adaptability. All selected materials should have reliable replacement sources available.

- Floor and lower wall surfaces should accommodate intended movable and flexible furniture and furnishings.
- Architectural components such as operable walls and doors should be selected for ease of use and durability.
- Casework and built-in architectural components should be adaptable at the individual component level to facilitate modification by school staff.

Furniture, Fixtures, and Equipment (FF&E)

Design teams should refer to the SPS Furniture Catalog, current version, for the majority of FF&E items to be provided.

When site-specific applications are needed, then:

- FF&E should support flexible and adaptable teaching and learning approaches outlined above and in individual program area descriptions.
- When possible, accommodate a minimum variation in types of FF&E to facilitate consistency throughout the facility.
- Proposed items should provide long term durability coupled with ease of access, replacement, and maintenance.
- Maximize the ability to store furniture and equipment in high density configurations to minimize the need for dedicated storage areas and maximize teaching/learning space.

Strengthening Community and Collaboration

"How could your school interact with your family? What would it look like? What would it feel like?"

"Possibly a meeting room/conference room where parents and teacher could discuss things! It would look like if it were a meeting in a movie, where they're all talking and having fun! It would feel as if there are no worries or problems to tell my parents. Everything in school is alright, and safe!"

"Maybe a place where parents and guardians meet up to discuss problems, school-wise."

"A private office to talk to whoever wanted to speak with my family - it would be put to everyone's comfort."

"Rooms with good vibes and lots of plants for parents to be in when they come to school."

- Mercer Middle School Students, Design Workshop, March 2021

OSPI's research-based resource for schools emphasizes the importance of a high level of family and community involvement.

> *"**Family and community engagement in schools is associated with increased student achievement**...Traditional family involvement activities do not necessarily engage parents sufficiently in their children's learning…OSPI promotes a vision of families, schools, and communities working together in authentic partnerships to support the achievement of all students."*[1]

Seattle Public Schools has a variety of district-wide programs that build community and collaboration. These include:

School and Community Partnerships[2]

The Vision of Seattle's School and Community Partnerships Program is: "In collaboration with community partners and Seattle Public Schools leadership, the SCP Department ensures that the needs and strengths of every student are known, and partner services are differentiated to support students' academic and social-emotional growth, acceleration, and success." The department creates and offers supports that build the capacity of schools and community-based organizations to effectively and authentically partner.

Many of our current school buildings were designed for simpler times and smaller enrollments than we have today, so there is no excess of space. Spaces for partners have often been relegated to the margins -- portable classrooms, or storage rooms serving as offices and meeting spaces. As the need for partnerships with families and community services providers has grown, so has the need for spaces for these activities.

The number of community-based organizations active on any given middle school campus can range widely across district Middle Schools. They operate before, during and after school hours and provide a variety of services. Design teams shall verify the number of organizations to be accommodated within the site-specific Ed Specs process. To provide spaces for these important relationships, we are recommending the inclusion of a suite of three offices with a shared conference/workroom.

School-Family Partnerships

Equally important to strengthening community is the role of the family in supporting the student's learning.

"Over 50 years of research links the various roles that families play in a child's education--as supporters of learning, encouragers

[1] "Nine Characteristics of High-Performing Schools, A research-based resource for schools and districts to assist with improving student learning, OSPI, second edition, June 2007, p. 10.
[2] SPS website, Departments > Community Partnerships, accessed February 2021.

of grit and determination, models of lifelong learning, and advocates of proper programming and placements for their child."[3]

SPS' School-Family Partnership Program notes that: "The purpose of family engagement is to improve student outcomes by building family and school staff capacity to make school environments welcoming, to strengthen two-way communication, to facilitate and encourage respectful interactions, and to increase shared power and responsibility."[4]

So, supporting relationships between schools and families is yet another reason for prioritizing resources for small group meeting spaces that are a school-wide resource, and not "owned" by any administrative or staff person. Teacher-family meetings have often occurred in classrooms, but additional spaces will allow counselors and administrators to meet with family members and students outside of their professional offices that may seem more "official" and less welcoming.

- Toward that end, we have included additional conference rooms, collaboration spaces, and breakout rooms.
- To support the inclusive and authentic engagement of families, a Family Engagement Room shall provide a warm, home-like sense of welcome, with upholstered residential scale furnishings, carpet, soft lighting, and quiet acoustics. See activities, spatial descriptions, and adjacencies in "What Do We Do: Building School-Community Connections."

Accommodating Students and Families Experiencing Homelessness

In 2019, two workshops brought together SPS staff and community partners to identify spaces that should be planned differently to accommodate students and families experiencing homelessness. This section is adapted from meeting notes.[5]

Approximately 4% of students in Seattle Public Schools are experiencing homelessness.[6]

A student or their family is considered homeless according to the McKinney-Vento Act's definition of homelessness, which is: Individuals who lack a *fixed, regular, and adequate* nighttime residence. They are those who are:

- Sharing the housing of others due to loss of housing, economic hardship, or similar reason.
- Living in emergency shelter or transitional housing.
- Living in motels, hotels, trailer parks, or camping grounds due to lack of alternative adequate accommodations.
- Living in a public or private place not designed for or regularly used as accommodations.
- Living in cars, parks, abandoned buildings, substandard housing, bus or train stations, or similar settings.

"The McKinney-Vento Education of Homeless Children and Youth Assistance Act is a federal law that ensures immediate enrollment and educational stability for homeless children and youth. McKinney-Vento provides federal funding to states for the purpose of supporting district programs that serve homeless students."[7]

It was agreed the following accommodations would allow schools to better support those students experiencing homelessness.

- Welcoming Entrance: Students and families particularly need to feel welcomed and a sense of community.
  - While a secure entry vestibule is needed, the spaces just beyond that vestibule should heighten the sense of community.
  - On the exterior, long, linear fences and barriers can be re-defined to carve out small social and play spaces that are more engaging and less institutional.
- The Family Engagement Room shall be located in proximity to storage for clothing, school supplies, and provide for the storage of "essential belongings" as noted below.
- Clothing is stored for distribution as needed. A large commercial grade washer and dryer, as well as a large utility sink, are needed somewhere within each school to allow students or families to wash clothes. Laundry appliances should be in the Health Services area. Location should be discreet so that students cannot readily observe families doing their

[3]"Partners in Education: A Dual Capacity-Building Framework for Family-School Partnerships, Mapp, K.L, & Kuttner, P.J., Southwest Educational Development Laboratory (now part of American Institutes for Research), 2013, p. 5.
[4] SPS website > Departments > Family Partnerships > Family Engagement Pillars, accessed February 2021.
[5] Accommodating Students & Families Experiencing Homelessness: Educational Specification Implications for Elementary, Middle and High Schools, June 6 & December 10, 2019, notes by Cheri Hendricks, member of Integrus Educational Specifications project team.
[6] "2020-21 Fast Facts & Figures," Seattle Public Schools website> Departments > Communications > Facts & Figures, Feb 2021.
[7] OSPI website entitled "Education of Homeless Children and Youth, accessed 5/30/19.

laundry. See "What Do We Do: Health Services" for spaces and features to meet this need.
- School supplies are stored for distribution as needed.
- Food, clothing, and/or supplies are provided to students in backpacks, which must be stored nearby when not in use.
- Storage of "essential belongings": In middle and high schools, student lockers are critical for homeless students to store their essentials. Lockers will be provided, in addition to those that are a general resource.
- Students experiencing homelessness are leaving shelters very early in the morning. Breakfast is typically offered ~10 minutes before school starts, so it is preferable if the Student Dining area is located near a main entry.
- Food support: To provide food, the district partners with food banks. Some schools receive "dry" pantry items, some receive fresh items, and the type of food and the mix of dry vs fresh can change over time, depending on the partner and on food availability. So, every school will need capacity to store and distribute both dry and fresh foods. Perishable food storage is currently the greatest unmet need.
  - Food storage location: co-locate with community kitchenette, which is typically located adjacent to the student dining area. Utilize the sink and countertop in the Community Kitchenette. The sink should be of sufficient size to wash fresh foods. The countertop should be dimensioned to allow at least 6' of clear workspace in addition to the sink. The food storage should be configured so that tables can be placed nearby to support a "farmers market" display of pantry and fresh items to maintain the dignity of students and families needing food assistance.
  - Dry food storage: Provide a full height, 4' wide, dedicated lockable pantry, that is in addition to base and upper cabinets provided for the community kitchenette.
  - Fresh food storage: Provide a full size dedicated lockable commercial refrigerator/freezer that can maintain safe food temperatures, in addition to the residential grade refrigerator/freezer for occasional community use.
  - See Community Kitchenette in Student/Dining Commons for spaces and features to meet this need.

Community Use of District Facilities

The District has a long-standing commitment to encouraging use of facilities by the general community. There are multiple on-going relationships with outside-of-school time providers, health professionals, and a formal joint use agreement with the Seattle Parks & Recreation Department for use of gymnasiums, libraries, student dining/commons spaces, as well as playfields and outdoor athletic areas.

Therefore, core areas including the Student Dining/Commons, the Gymnasium, and the Library, shall be designed to accommodate use outside of the school day, while securing the rest of the building that is not in use. Restrooms shall be located within proximity to these core spaces to serve after hours uses. HVAC, lighting, and security systems shall be zoned so that these services can be provided to core areas without requiring utility use throughout the entire building.

It is ideal if parking can be provided near these core spaces where the largest number of people will gather after hours for events.

Refer to requirements to facilitate community use of gymnasiums in the section on Physical Education and Athletics.

See "What Do We Do: Building School-Community Connections" for requirements for spaces and adjacencies described herein.

SPS DESIGN PRINCIPLES[8]

- **The building design incorporates and helps convey the school's mission to the community.**
- **The building provides access and spaces for parents to participate in decision making and curricular activities, and to gain a better understanding of their role in helping students meet academic expectations.**
- **The building provides spaces for the community to be actively involved in promoting a rigorous academic environment.**
- **Community resources and spaces help support and supplement the school's educational programs.**
- **The building provides spaces for students to be mentored by community members.**

[8] Design criteria from SPS Generic Educational Specifications for Middle Schools, December 2011, p. 7.

What Do We Do?

Our Program for Neighborhood Middle Schools

"Today, every day, children around the world, especially underprivileged ones,
are robbed of opportunities for social advancement and self-actualization.
One large part of the reason why is that they live in unhealthy or cognitively dulling habitats and
attend school in buildings that put a drag on or literally undermine attention, motivation, and effective learning…
well into the twenty-first century, all this is much more scandalous because
***now we know* that design matters in people's lives,**
and it matters in lasting, profound, and indeed, in foundational ways."[1]

Introduction to the Format

In this chapter detailed Educational Specifications are provided for each of the individual programs, including:

- A description of activities conducted in the program.
- A description of the spaces needed to accommodate the activities.
- A program area table indicating the number of students served and the proposed quantities and sizes of spaces to serve the program.
- A description of functional relationships (adjacencies)
- Adjacency diagrams indicating primary and secondary adjacencies.
- Where applicable, diagrams indicating the size and layout of furniture and equipment.

Space features such as casework, equipment, electrical requirements, and the like, are included in matrices in Appendix "A".

Furniture and equipment layouts are included in the Seattle Public Schools Furniture Standards Workbook, current edition, as referenced in the section "Introduction to the Middle School Educational Specifications."

These specifications are organized following the order in which they are listed in the Program Space Summary included herein, which in general outline is:

Learning Settings

- General Education
- Science
- Special Education
- Career & Technical Education
- Visual & Performing Arts
- Physical Education & Athletics

[1] Goldhagen, Sarah Williams, Welcome to Your World: How the Built Environment Shapes Our Lives, 2017, p. 276.

Learning Support

- Library and Library Services
- Student Dining Commons and Stage
- Outdoor Classrooms and School Garden
- Health Services
- Administration and Counseling

Building Support

- Facility Operations
- Gender Neutral Toilet Rooms / Locker Rooms
- Student Lockers

Building Capacity and Program Area Summary

This section includes two key documents:

The Middle School Ed Spec Capacity Model is based upon the proposed number of large group teaching stations. The assumed capacity for each full-size teaching station is 30 students, though typically classrooms and labs have been sized to accommodate up to 32 students and 1 staff person within each space, because that is the maximum number of students that current teaching contracts allow for academic classes. The calculation demonstrates that at 100% utilization a theoretical maximum of over 1,300 students could be accommodated within the middle school. A typical middle school capacity utilization of 83%, which accounts for the use of classrooms by teachers during their planning periods during a 6-period day, would result in a capacity of almost 1,100. For middle schools with a 7-period day, the utilization rate is over 85% and would result in a capacity of ~1,130.

The Middle School Program Area Summary identifies all program-specific spaces, as well as the learning support and building support spaces necessary to provide a complete middle school facility. The spaces recommended are based upon program feedback, as balanced by comparisons with other schools.

A comparison of program areas for the SPS 2012 Generic Middle School Ed Specs, as well as the following Seattle Public Schools middle schools was prepared:

Middle School	Construction Type	Right Sized Capacity*	Ed Specs Date	Opened
Robert Eagle Staff	New	Designed for 1,000, but reduced to 912 as configured for Licton Springs K-8	2014	2017
SPS District-wide	Generic Middle School Educational	1,000	2012	-
Denny	Replacement	974	2008	2011
Madison	Modernization and Addition	970	2002	2005

**Right-sized capacity is the total number of students a permanent school building can house with all appropriately sized and configured classroom spaces loaded with the maximum number of students per the negotiated collective bargaining agreement on class size. Capacities for existing school buildings are cited from the SPS Facilities Master Plan Update referenced below.* [2]

[2] SPS Facilities Master Plan Update 2018, p. 22.

In addition, program areas from Educational Specifications for middle schools of comparable size in the Pacific Northwest were used to evaluate how spaces should be adjusted. These included:

Middle School	Construction Type	Capacity	Ed Specs Date	Opened
Einstein	New in lieu of modernization	1,100 students	2017	2020
Glacier	New construction	950 students	2014	2019
Alderwood	New in lieu of modernization	800 students	2014	2017
Islander	New addition	1,100 students	2014	2016
Odle	New in lieu of modernization	1,200 students	2013	2016
Hudtloff	New in lieu of modernization	750 students	2010	2013

Where there was general consistency among areas for the SPS Middle Schools, the average of areas for SPS schools was used. Where there was inconsistency, or a trend toward larger or smaller spaces, or elimination of spaces typically seen ten or twenty years ago, then the program areas from other middle schools were taken into consideration as indicators of the regional trends.

In some cases, sizes of spaces were tested with plan diagrams to confirm that they are adequate to accommodate the anticipated group sizes and activities. These diagrams are included at the end of each program section when it has been deemed they may add value to a design team's understanding.

If questions arise about accommodations for teachers and staff please reference Appendix G – Collective Bargaining Agreement between SPS and certified staff.

General Guidelines

This section presents considerations and guidelines for planning and design that apply to the site, the school building, or to elements of the building that are not program specific. These considerations and guidelines are offered for the following aspects of school design:

- Identity, Entry, and Wayfinding
- Site Circulation, Transportation, and Distribution Services
- Safety, Security, and Risk Management

REV 5/14/2021

MIDDLE SCHOOL ED SPEC CAPACITY MODEL			District-Wide		
Nbhd	Program Area	# Students	# T.S.	Calculated Capacity per Space Type	Capacity @ 100% Utilization	Capacity Totals @ 83% Utilization (6 pds/day)
General Education						
	Core Academic (English, Math, Social Studies)	30	24	720		
	Flex Classrooms, Full Size	20	1	20		
	Flex Classrooms, Half Size	-	-	-		
	Science Classroom/Labs	30	6	180		
	World Language	30	3	90		
General Education - Subtotal			**34**	>>>	**1,010**	**838**
Special Education		*# Students based upon WSS and CBA*				
	Classroom: Resource Services	22	1	22		
	Classroom: Access Services	13	1	13		
	Classroom: Social/Emotional Services	10	1	10		
	Classroom: Moderate Intensive Services	9	1	9		
	Classroom: Intensive Services	7	1	7		
Special Education - Subtotal			**5**	>>>	**61**	**51**
Career & Technical Education						
	STEM Innovation Lab	25	1	25		
	CTE: Computer Science	25	1	25		
	School-Wide Flex Adjacent Library*	-	-	-		
Career & Technical Education - Subtotal			**2**	V	**50**	**42**
Arts						
	Visual Arts Classroom	30	1	30		
	Performing Arts Classrooms	45	2	90		
	Stage (Drama Classroom)	0	1	0		
Visual & Performing Arts - Subtotal			**4**	>>>	**120**	**100**
Physical Education						
	Physical Education, Main Gym	25	2	50		
	Physical Education, Fitness Room	25	1	25		
Physical Education - Subtotal			**3**	>>>	**75**	**62**
TOTAL STUDENT CAPACITY			**48**		**1,316**	**1,092**

Stage is counted as a T.S. but not assigned capacity because few MS have drama pgms.

SpEd is included in Capacity Calculations for secondary schools because they're schedule-based.

Target enrollment is 900 students for middle schools with 1000-seat capacity.

Program Area

	Space Description	# Students	# T.S.	# Rooms	Unit SF	Total SF
General Education	**Academic Neighborhoods**					
	General Education Classrooms	Up to 28	24	24	900	21,600
	Flex Classroom, Full Size	Up to 28	1	1	900	900
	Flex Classroom, Half Size	Up to 15	-	-	-	-
	Science Classroom/Universal Lab	Up to 32	6	6	1,350	8,100
	Shared Science Prep & Storage	-	-	3	300	900
	Neighborhood Learning Commons	varies	-	6	600	3,600
	Small Group Collaboration Rooms	Up to 8	-	6	200	1,200
	Display	-	-	6	50	300
	Book & Technology Storage	-	-	6	100	600
	Other General Education Classrooms					
	World Language	Up to 28	3	3	900	2,700
	Teaching Kitchen *	-	-	-	-	-
	School-wide Resources					
	Small Group Collaboration Rooms - Distributed	Up to 8	-	1	200	200
	MTSS Breakout Rooms - Distributed	-	-	4	120	480
	Student Lockers (includes added hallway width to access lockers)	-	-	1	Allowance	1,800
	Central Science Kit Storage	-	-	1	260	
	Required Subtotal		**34**			**42,380**
Special Education	Classroom – Resource Services	Up to 23	1	1	450	450
	Classroom – Access Services	Up to 13	1	1	450	450
	Classroom - Social/Emotional Learning (SEL)	Up to 10	1	1	900	900
	Classroom – Moderate Intensive Services	Up to 10	1	1	900	900
	Classroom – Intensive Services	Up to 7	1	1	1,000	1,000
	Teaching Kitchen*	Up to 6	-	Zone	**	**
	Shared Toilet Room with Changing Table - adjacent to Intensive Servic	1	-	1	150	150
	Shared Toilet Room with Changing Table - adjacent to Moderate Intens	1	-	-	-	-
	OT/PT Room with Integrated Storage	1	-	1	600	600
	Speech/Language Pathologist Office, Psychologist Office	2	-	2	120	240
	Required Subtotal		**5**			**4,690**
CTE	Universal Lab	Up to 32	2	2	1,350	2,700
	Prep/Storage Space	-	-	2	150	300
	Sci/Engrg/Industry Project Lab with Storage	-	-	-	-	-
	Required Subtotal		**2**			**3,000**

Program Area

	Space Description	# Students	# T.S.	# Rooms	Unit SF	Total SF
Visual and Performing Arts	**Visual Arts**					
	Visual Arts Classroom	32	1	1	1,350	1,350
	Arts Supply & Project Storage	-	-	1	300	300
	Kiln Room	-	-	1	150	150
	Future Digital Arts Classroom **	-	-	-	-	-
	Performing Arts					
	Performing Arts Practice Room A / Choral & Orchestra	Up to 60	1	1	1,600	1,600
	Performing Arts Practice Room B / Band	Up to 90	1	1	2,000	2,000
	Instrument Storage Room - Band	-	-	1	400	400
	Shared Storage (music stands, chairs)	-	-	1	400	400
	Music, Practice Room - Ensemble / Mixing	Up to 12	-	1	300	300
	Music, Practice Room - Small	Up to 4	-	4	75	300
	Music, Shared Library	-	-	1	150	150
Physical Education and Athletics	Main Gymnasium	Up to 32	2	2 sides	4,250	8,500
	Fitness Room	Up to 32	1	1	2,400	2,400
	Health Classroom	-	-	-	-	-
	PE & Athletics, Student Lockers/Changing	Up to 32	-	2	1,250	2,500
	PE & Athletics, Student Showers/Toilet	Up to 4	-	2	150	300
	Staff & All-Gender Toilet/Changing/Shower Rooms	-	-	2	130	260
	PE Staff Office & Lockers	-	-	2	150	300
	PE Staff Showers/Toilet	-	-	2	85	170
	PE Equipment Storage	-	-	1	350	350
	Athletics Equipment & Uniform Storage	-	-	1	350	350
	Community Partner Storage at Gym	-	-	1	300	300
	Outdoor Equipment Storage, PE & Athletics (unheated)	-	-	1	120	120
Library and Technology Services	Library: Group Instruction, Reading, Circulation, Stacks	Up to 75	-	1	4,500	4,500
	Workroom (formerly Lib office was separate)	-	-	1	250	250
	Computer Lab	-	-	-	-	-
	School-wide Flex Classrooms, or optional makerspace	Up to 64	-	-	-	-
	Conference Room, Medium	Up to 8	-	1	180	180
	Conference Room, Small	Up to 4	-	3	120	360
	Information Technology Support (former Computer Storage/Repair)	-	-	1	200	200
	Technology Equipment Storage	-	-	1	150	150
	Restrooms	-	-	-	-	-

Program Area

	Space Description	# Students	# T.S.	# Rooms	Unit SF	Total SF
Dining Commons and Stage	**Commons**					
	Student Commons/Dining Area (includes thrust stage)	Up to 400	-	1	7,480	7,480
	Vending machine/Grab & Go Niches, and Handwashing Stations ***	-	-	1	included above	
	Kitchenette for Community Use, SpEd Life Skills, & World Language	Up to 6		1	320	320
	Pantry (for supporting Homelessness)	-	-	1	d in Commons above	
	Stage	Up to 80	1	1	2,600	2,600
	Performing Arts Storage	-	-	1	200	200
	Dedicated restroom/changing rooms & makeup area	Up to 6	-	2	200	400
	Kitchen					
	Kitchen, includes receiving, food prep, scullery	-	-	1	1,100	1,100
	Walk-in cooler	-	-	1	200	200
	Walk-in freezer	-	-	1	200	200
	Dry storage	-	-	1	350	350
	Manager's office	-	-	1	140	140
	Nutrition Services Laundry / soap storage	-	-	1	70	70
	Servery	-	-	1	800	800
	Adult (kitchen staff) toilet/lockers	-	-	2	50	100
Health Services	Waiting/Reception (shared)	Up to 4	-	1	220	220
	School Nurse (District provider)					
	School Nurse Office & Treatment Room	1	-	1	180	180
	Cot Room (2 cots)	Up to 2	-	1	120	120
	Toilet Room w/ shower, washer & dryer	-	-	1	120	120
	School Based Health Center (Outside Provider)					
	Health Care Provider Office / Conference Rm	1	-	1	120	120
	Mental Health Counselor Office	1	-	1	120	120
	Counseling Room	Up to 6	-	1	150	150
	Itinerant/Shared Provider Office	-	-	1	120	120
	Exam Room	1	-	1	100	100
	Lab	-	-	1	150	150
	Toilet Room	1	-	1	50	50

Program Area

	Space Description	# Students	# T.S.	# Rooms	Unit SF	Total SF
Administration and Counseling Services	**Administration - Centralized**					
	Public Reception & Waiting	Up to 6	-	1	500	500
	Office Manager/Secretary/Support	-	-	1	200	200
	Office Type 2MS: Attendance Office	-	-	1	150	150
	Office Type 2MS: Registrar Office	-	-	1	150	150
	Office Type 1MS: Principal, Ass't Principal or House Administrator	-	-	2	180	360
	Office Type 4MS or 5MS: Shared Office (single occupant)	-	-	1	120	120
	Office Type 6MS: Shared (Itinerant) Offices (double occupant)	-	-	1	120	120
	Asst Principal/House Administrator Waiting/Supervision	2	-	1	30	30
	Conference Room, Medium	-	-	1	180	180
	Administration Workroom (Includes: Copy, Mail, Kitchenette)	-	-	1	220	220
	Records/Secure Storage	-	-	1	180	180
	Closet/General Admin Storage	-	-	1	120	120
	Patrol Closet	-	-	1	30	30
	Book Storage Room	-	-	-	-	-
	Staff Toilets	-	-	2	50	100
	Admin/Counseling Services - Distributed					
	Waiting/Supervision Area	2	-	3	30	90
	Asst Principal or House Administrator	2	-	3	150	450
	Office Type 2MS: Counselor Office	2	-	3	150	450
	Conference Room, Small	-	-	3	120	360
	Meditation Room	3-4	-	2	80	160
	Distributed Resources					
	Office Type 4MS or 5MS: Shared (Itinerant) Office (single occupant)	-	-	1	120	120
	Office Type 5MS: Shared (Itinerant) Offices (double occupant)	-	-	1	120	120
	Office Type 3MS: Security Office	-	-	1	150	150
	Distributed Resources - General Access					
	Staff Lounge	-	-	1	900	900
	Staff Workrooms	-	-	3	180	540
Family & Community Partner Support	**Community & Family Engagement Suite**					
	Family Engagement Room	-	-	1	900	900
	Shower/Changing Room	-	-	1	65	65
	Toilet - All Gender, Minimum Two Stalls	2	-	1	120	120
	Clothing & Backpack Storage	-	-	1	100	100
	School Supplies Storage	-	-	1	20	20
	PTA/Volunteer Storage	-	-	1	100	100
	Family Support Office/Conference Room	-	-	1	120	120
	Community Partner Suite - Conference/Workroom	-	-	1	240	240
	Community Partner Suite - Offices	-	-	2	120	240

Program Area

	Space Description	# Students	# T.S.	# Rooms	Unit SF	Total SF
General Support	Central Receiving / Storage / Workroom / Break Room	-	-	1	600	600
	Lead Custodian Office	-	-	1	100	100
	Equipment Storage (allowance)	-	-	2	400	800
	Furniture Storage (allowance)	-	-	1	400	400
	Facilities & Grounds Storage	-	-	1	150	150
	MDF Room	-	-	1	300	300
	IDF & Other Telecom/Data Rooms	-	-	3	130	390
	TOTAL TEACHING STATIONS		**50**			
	BUILDING ASSIGNABLE SF SUBTOTAL					**104,065**
Non-Assignable Areas (per OSPI	Staff Toilet/Lockers/Shower	-	-	2	80	160
	Custodial Closet (distributed throughout)	-	-	7	80	560
	Boiler Room	-	-	1	1,000	1,000
	Mechanical Rooms (occupied floors)	-	-	allowance	9,000	9,000
	Mechanical Rooms (unoccupied floors)	-	-	allowance	5,000	5,000
	Electrical Rooms (main electrical room + satellite closets)	-	-	allowance	1,000	1,000
	Circulation, Gen'l Purpose Toilet Rms, & Interior/Exterior Walls/Structure		***		37%	38,504
	TOTAL BUILDING GSF					**159,289**

* Co-locate with Community Kitchenette

** Future Digital Arts Classroom is accounted for within the General Education Classrooms

*** Increased for adequate circulation + energy code wall thickness

***** Located just outside Commons but included in SF allowance

Identity, Entry, and Wayfinding

"**Blaze the way**. School can start at a student's front door if the commute is designed as well as the building. Walking paths and bicycle trails connect a school with the homes it serves."[1]

Identity and Entry Design

IDENTITY

For all Seattle Public Schools, the school design should convey that the school is a place that:

- Is warm and welcoming for all students;
- celebrates access to and success in learning;
- represents a significant investment by the community in education;
- provides a lasting and meaningful space within the community; and
- welcomes community participation in the life of the school.

In addition, there are site-specific aspects of school identity. Work with the School Design Advisory Team (SDAT) to understand the specific history, context, and culture of each school. Consider:

- School history and heritage;
- Neighborhood history and heritage;
- Characteristics of the surrounding ecological community, and potential habitat restoration;
- Social patterns, activities, and demographic make-up of the student body and larger school community; and
- Civic presence within the larger context of the city.

With the SDAT, explore which of these histories and patterns should be physically integrated within the design elements of the school and site. Propose options, and refine the design of these elements until the SDAT group agrees they are sufficiently representative of the breadth of the school community.

In addition, provide plenty of places where students and community members can customize both two-dimensional and three-dimensional displays of heritage and culture that change over time.

Entry Design

Entry and Neighborhood Presence

It is important for students and all stakeholders to feel that the school is approachable and welcoming. Entries, in conjunction with the overall building design, establish the first impression of the academic community within the school, the relationship the school has with the neighborhood, and what to expect upon entering the school. The entries also represent key transitions as one goes from public neighborhood/urban spaces to spaces within the school community that, while still public and open, function with a distinct culture and system.

Middle schools have relatively large student populations, and many are located on tight urban sites. To accommodate the various arrival modes (walk, bus, drop-off) and the number of students that enter the school in a limited timeframe, it may be necessary to have more than one entry.

General Requirements for Entries

- Entries should be located to maintain a separation between bus and car vehicular flows and reduce to the extent possible pedestrian vehicular crossings.
- They should connect to existing neighborhood circulation patterns. Coordinate with city agencies, neighborhood plans,

[1] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 125.

and onsite personnel to understand pedestrian, vehicular, and service movements. Identify both current and future needs to be addressed.
- Entries should provide for adequate width and clearances to accommodate the volume of students and event movement through the various entries and approaches to and through the site.
- The principle entry should remain the clear 'main' entry to the school even if other significant entries are developed for high capacity times.

The Principle Entry should:

- Provide sufficient transparency that the entry and reception areas are visible from the public way and act as a beacon drawing school community members and visitors to the school's gateway.
- Be located for excellent sightlines from the office manager/reception area into the vestibule, and to provide high visibility from the central administration offices toward the exterior public areas and entry approach.
- Provide a covered and protected area as part of the entry sequence for students to wait in a highly visible and approachable area. Cover to also provide weather protection for people awaiting remote door release to enter if/when vestibule is not open.
- Be designed as a secure entry into the school. See Secure Vestibule Configuration in section "What Do We Do: Site Circulation, Transportation, and Distribution".
- Provide a clear and accessible intercom location for people who need to be 'buzzed in.'
- Entry and reception areas should provide inviting lighting, warm materials, comfortable furnishings, and displays of student work that celebrate the life of the school.

Secondary Entries

Given the size of the school and various programmatic requirements, the middle school may need to accommodate clear and welcoming secondary entries. These should not create visual confusion regarding the location of the principle school entry. They should be located with clear and open sightlines from various points on site, and should not be recessed or create places to hide.

Minor Exit Doors

These should be architecturally de-emphasized, fit seamlessly into the overall building configuration, and should not be recessed or create places to hide.

Service Entries/Loading Docks – See section "What Do We Do: Site Circulation, Transportation, and Distribution."

Meet applicable City of Seattle requirements for access and screening. Within that context, provide clear open sightlines from various points on site and avoid creating hiding places as much as possible.

Special Considerations

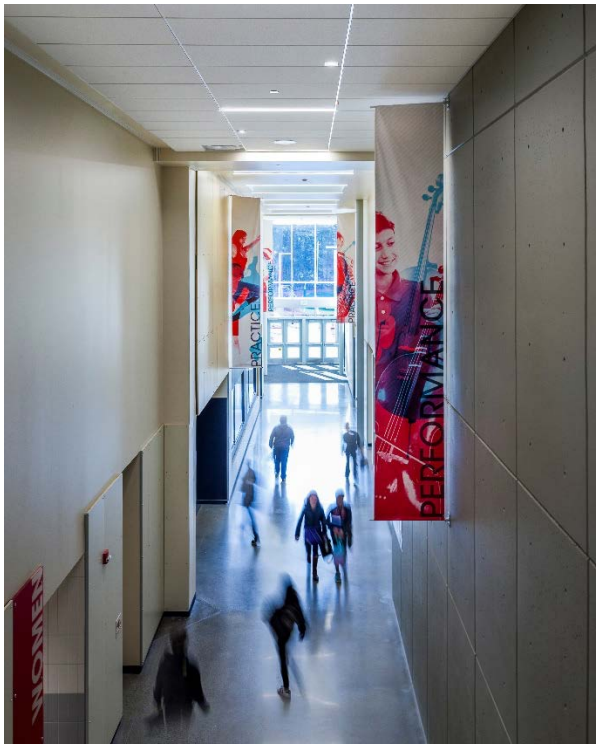
Adaptability/Resilience – Entries should be able to adapt to various temporary uses or access requirements.

- How do they function during/support open houses or larger community events?
- How do they function during/support heightened health checks or other similar needs to check visitors prior to access?
- How do they function as neighborhood resource distribution points during health or environmental events when access is not available, but neighborhood or student support is provided?

Energy

The principle entry and other secondary entries where large flows of students/visitors are expected are to be provided with vestibules to support SPS: Natural Resource Conservation Policy and Procedure Goals.

Wayfinding Overview



Wayfinding systems are essential to provide a sense of orientation and enable smooth and coherent navigation and movement through the school. The wayfinding system should engage multiple senses and not be limited to text-based signage. It should accommodate both first time visitors as well as students and staff that use the building daily and are building a deep mental map of the school over time. An effective system will contribute to the sense of well-being, safety, and security within the facility.

Integrated System

Provide an accurate, clear, and quality information system that allows for streamlined flow and allows students, staff, and visitors to be as autonomous as possible. The system is to include:

- Intuitive wayfinding
- Spatial cues and indicators
- Consistent and clear patterns and directions
- Age and culturally relevant language
- Accessible and approachable design.

Core Principles[2]

Connect Places – Wayfinding design can go beyond informational text, and create deeper connections to a place, reflect its community and cultivating a sense of pride. Destinations are more than a room name but rather a place with activities, relationships, and meaning.

Promote Active Movement – Make visible, and reduce the physical barriers, to active ways to move to and through the school.

Maintain Movement – Short passing periods require that people can move efficiently between spaces; frequent stopping and starting to check for directions discourages effective flows. Consistent, clear and visible wayfinding elements allow for people to navigate while they maintain their movement. Information is to be able to be quickly read and easily comprehended.

Predictability – Effective wayfinding systems are predictable. Predictable information and spatial conditions provide for patterns to emerge and users of the school to be able to rely on the system to provide the information they expect. It allows for users to develop a clear mental map of the school and helps to navigate new situations quickly.

Simplify Information – Provide information in meaningful amounts and in a timely manner throughout the school.

Accessible – Signage to be accessible and designed to be comprehensible by a wide range of users, including people of all ages and ability levels. Comply with the Americans with Disabilities act (ADA).

Components and Elements[3][4]

Landmarks

Use landmark elements or spatial characteristics that provide clear orientation cues for key spaces or directions of movement within the school. Landmarks also provide for memorable and easily describable characteristics that aid in mental map development and verbally conveying directions to others.

[2] Alta – Six Wayfinding Principles that Make Communities Easier to Navigate, Oct. 2017
[3] Thompson, 4 Ways to Improve Wayfinding, September 2018
[4] Foltz, www.ai.mit.edu/projects/infoarch/publications/mfoltz-thesis/node8.html, 2020

Lighting

Use daylighting and artificial lighting design to provide effective wayfinding cues for navigation, such as by:

- providing high lighting levels at key navigation crossroads,
- indicating a preferred direction of travel, or
- defining moments of pause or gathering within a sequence.

Color

Use color to support intuitive wayfinding, such as brighter colors for active and vibrant spaces that encourage active movement, or softer colors that define moments of pause or gathering.

Materials

Use differing building materials to create distinguishing visual character for aid in defining arrival, key destinations and an overall sense of place for the school. Material continuity along main paths can also reinforce well-structured and clear continuous routes for people as they move through the school.

Consider all Surfaces

Wayfinding components and elements are not limited to wall surfaces. Ceiling and floor surfaces can also play an important role in indicating direction of travel, arrival, and differentiation of spaces.

Signage

Signage shall be clear, and legible at appropriate distance and intervals. Often dozens of languages are spoken by the students, staff and community members, so consider use of universal symbols and/or use of a second language that is most familiar to the greatest number of students.

Site

Key characteristics:

- Clear intuitive and visible approach and path to arrive at the principle entry.
- Clear signage to direct vehicular movement to allowed drop off zones.
- Areas where there are different modes of arrival (vehicles, pedestrians, delivery, etc) should have high visibility to provide lines of sight for safety and easy navigation of intersections occurring both on site and near city Rights-of-Way.
- The school's name, reader board and flagpole are to be clearly identifiable and associated with the main building entry.

While there are many factors influencing the optimum location of the principle school entry, consideration should be given to locating the entry near a safe, legal street crossing. Reference the publication "Best Practices for School Traffic Design" from the School Traffic Safety Committee.[5] Also see section: "What Do We Do: Site Circulation, Transportation and Distribution."

Integration of Building and Site

To confirm the integration of the design of the site with that of the building, at each review phase, design teams shall provide an integrated site and floor plan showing the relationship between building interior and exterior. At Design Development and subsequent phases, the building plan shall include furniture, fixtures and equipment, and the site plan shall include proposed improvements and amenities.

[5] City of Seattle School Traffic Safety Committee, "Best Practices for School Traffic Design," 2/18/2021, found at http://www.seattle.gov/Documents/Departments/SDOT/SRTS/Traffic%20safety%20committee/BestPracticesforSchoolTrafficDesign.pdf

Interpretive Signage and Environmental Graphics

Interpretive educational signage and environmental graphics should be strongly considered to educate the students, staff, and public regarding the school and its community, and foster a sense of place, meaning and pride. Signage and graphics should include:

- Cultural and historical characteristics of the school community and the site;
- Characteristics of the surrounding ecological community;
- The performance of sustainable design components within the building and site; and
- The school mascot and other symbols of identity that resonate with the school community.

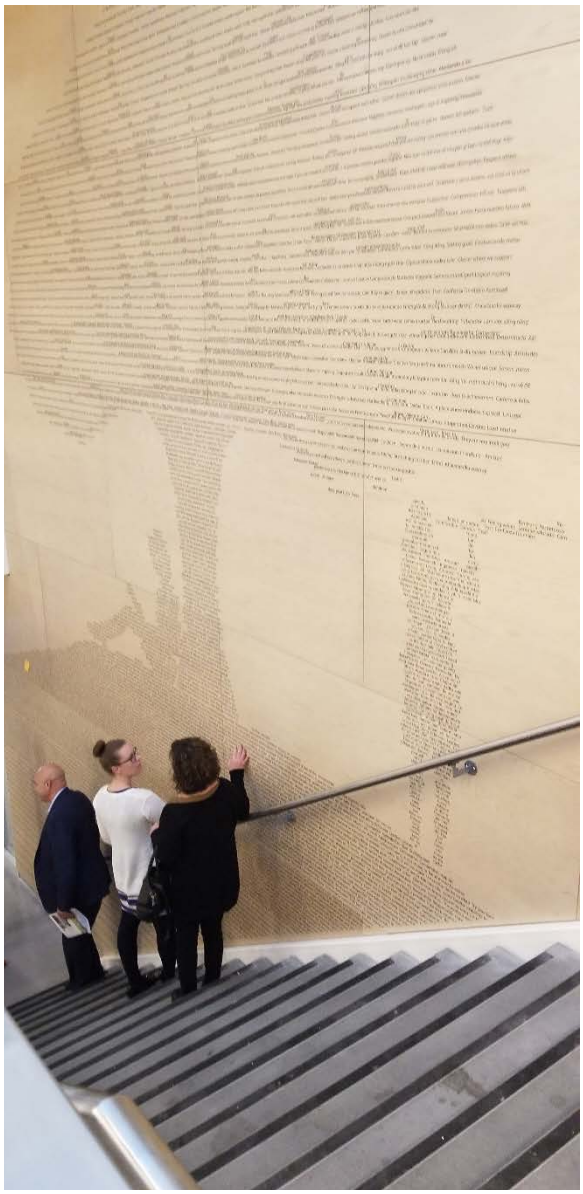
Core Principles

Illuminate the power of place: provide clear messages that articulate what makes a particular site and school facility meaningful and significant within its larger cultural and ecological context.

Enhance the sense of community: Draw attention to the school's and the area's unique history, identity, and characteristics so people can best appreciate the story of the school within its community.

Inspire a sense of stewardship: All schools in the District are public spaces and places. Interpretive signs and graphics can strengthen awareness and care for the school from all who interact there.

Self-sufficiency: Provide high quality content and materials that contain standalone and complete information, and that are constructed of materials that require minimal maintenance.



Site Circulation, Transportation, and Distribution

"**Highlight the site**. Every school is located with its own unique geological features and natural history. Call attention to a school's site with design, construction, and signage."[1]

This section provides guidance for the safe, efficient movement of people, goods, and services to, from and through the site as it relates to District and school operations as well as surrounding urban transportation networks.

Site Planning & Design

The smooth and efficient movement of people – by foot, bicycles, cars, and buses – in and around the school site is essential. Provide hard surface walkways throughout the school grounds to accommodate circulation and site maintenance. The site must provide adequate areas for entering and leaving, parent pick-up and drop-off, parking, and play fields. Consider a multi-story building to free up site for student activities and for safe circulation.

The site should remain as natural as possible while still considering safety for students walking to and from school and circulating on the school grounds. Whenever possible, trees shall be left as a visual and sound screen between the school and the neighborhood. Steep banks should be avoided. Gentle berms (slope 1:4) can be used in grassy play areas to provide areas for socialization and play. Raised planting beds can incorporate seating for outdoor gathering areas.

Special Site Considerations

- Confirm with SPS whether an area of the site should be identified for future placement of four classrooms in portables (assume less than 5,000 sf so fire sprinkler system is not required). Extend all utilities (including water (potable and fire), sanitary sewer, electrical power, intercom, data, and fire alarm) to utility vaults to allow for future connections to portables. Assume gravity sanitary sewer system. **Size systems to accept additional portable utility loads.**
- Provide a designated location for an 8'x 10' container or shed to house natural disaster / emergency supplies on a hard surface at least 30' from building. This area should be easily accessible in an emergency. In a new building designed to current seismic codes, this storage area may be part of the building if accessible by exterior doors. See "Safety, Security & Risk Management" section for further requirements.
- Provide concrete pads for placement of bicycle racks, covered bicycle storage, trash receptacles, and portable toilets to be used during special events.
- Provide designated locations for community use including public restrooms.
- As of 2020, the School Traffic Safety Committee (STSC) is recommending a working group review elements of the City Code that frequently trigger the Departures process, with a goal of reducing the frequency in which Departures are required. Design teams should check with the School Traffic Safety Committee on the status of this effort before establishing their approach to the bus drop-off and on-site parking, as well as building height and other typical code departures.

Integrated Site and Floor Plans

In Concept & Schematic Design phases, design teams shall provide an integrated site and floor plan showing the relationship between building interior and exterior. At Design Development and subsequent phases, the site plan shall include improvements and amenities.

[1] The Third Teacher: 79 Ways You Can Use Design to Transform Teaching & Learning, OWP/P Architects, 2009, p. 147.

Circulation Overview

Consider how pedestrian and vehicular traffic will approach the site when planning bus/car/service drives and dropoff areas. It is preferred that the site be accessible from at least two streets. It is imperative that there is separation of pedestrians and vehicular traffic.

General

- Design teams should consult the City of Seattle School Traffic Safety Committee's "Best Practices for School Traffic Design" guide during early design phases. Link below.[2]
- Per the School Traffic Safety Committee design guide, on-site school bus dropoff should be provided only when on-street bus dropoff is not feasible.
- Opportunities to maximize pedestrian and bicycle modes of transportation to and from the site should be emphasized.
- The main school entrance should be adjacent to administrative offices.
- Pedestrian, car, buses, and service vehicle traffic must be separated.
- Provide for fire department emergency vehicles access.
- Provide security lights for access and egress for early morning, after school and evening activities. Lights should be on a timer and equipped with continuous dimming technology for specific light levels. Security lights should be independent from other building lighting, with switching that allows use only in needed areas. Lighting should be zoned per the Technical Building Standards.

Accessibility

All indoor and outdoor spaces on the school campus must be accessible. All facilities shall be in accordance with the Americans with Disabilities Act (ADA). Special attention to ADA accessibility may be necessary while planning the following areas:

- Entries and exits
- Corridors and stairways/elevators
- Restrooms
- Outdoor play areas
- Bus loading/unloading
- Car loading/unloading

Changes in grade should be accommodated with ramps for accessibility. Slope preference not to exceed 1:20; if steeper than 1:20, provide handrails. Provide visitor parking area, with required handicapped stalls, convenient to main building entrance.

Pedestrians

Activities

- Walking to and from school.
- Walking to and from play fields.
- Circulation within the site.
- Fire/safety drills.

Space Requirements

- Consider volume of traffic when planning sidewalk widths. (min. 5' wide)
- ADA access to all facilities is required. The main school entrance is the preferred accessible entrance.

Spatial Relationships

- Separate all pedestrian traffic from vehicular traffic.

Electrical, Plumbing & Mechanical Needs

[2] See www.seattle.gov/Documents/Departments/SDOT/SRTS/Traffic%20safety%20committee/BestPracticesforSchoolTrafficDesign.pdf

- Provide adequate lighting of sidewalks and stairs for use during night activities.
- Provide photocell and timer tied to energy management system for all exterior lights.
- Provide a minimum of five exterior lighting circuits/zones (not all exterior lighting on one circuit).
- Confirm requirements with SPS Technical Building Standards.

Special Considerations

- Analyze likely access paths to determine sidewalk locations.
- Widen sidewalks at intersections to prevent students from "short- cutting" and forming their own paths.
- Sidewalk edges to be level with ground for wheelchair use.
- Covered walkways from car and bus drop-off/pick-up points are desirable.
- Provide adequate signage for way finding (perhaps multi-lingual signage).
- Minimize attractiveness for skateboarders.

Bicycles

Activities

- Staff and students bicycling to and from school (requiring longer-term bike parking).
- Visitors and volunteers bicycling to and from school (requiring short-term bike parking).

Space Requirements

- Provide designated areas, bicycle racks, and covered bicycle parking for both short- and longer-term storing and locking bicycles, per Seattle Municipal Code 23.54.015.
- Racks to accommodate a variety of types of bicycles (human powered, electric, family and cargo bikes).
- Provide summary of bicycle parking calculations with the Design Development submittal.
- Provide paved area near the main entry to accommodate City-authorized/vendor-provided shared bicycles so that they are not left to clutter the sidewalks.k

Spatial Relationships

- Bike racks near entrances for student and staff bicycles, also for visitors, in highly visible locations, and accessible.
- Provide covered bike parking. Do not locate under breezeways necessary for making deliveries.

Electrical, Plumbing & Mechanical Needs

- Provide adequate lighting of bike accessible routes for use during evening activities.
- Provide a power outlet on pedestal or building wall for electric bike charging while bikes are secured – 2 locations.

Special Considerations

- Provide safe access onto site for bicycle riding and parking.
- Provide hard surfaces, asphalt, or concrete, to access and store bikes.

Passenger Vehicle Drop-off and Pick-up

The need for an on-site passenger vehicle dropoff and pickup area should be evaluated through the site-specific design process. This evaluation should include:

- Commuting patterns of students within the school's enrollment boundaries.
- Adequate on-site space to safely accommodate a dropoff area, while still providing adequate site area for student learning, gathering, and play.
- Consultation with the School Traffic Safety Committee on the need for and preferred location of a drop-off area.

Activities

- Drop-off and pick-up students by car.

Space Requirements

- Provide adequate hard surface area for passengers to safely exit vehicles.
- Size drop-off/pick-up zone for 4 vehicles at one time.
- Queuing typically happens off-site.

Spatial Relationships

- Car, buses, and service vehicle entrances and traffic must be separated, if feasible.

Electrical, Plumbing & Mechanical Needs

- Provide adequate lighting for safety.

Special Considerations

- Arrange site circulation so drop-off/pick-up activity does not stop all car traffic [for example, provide 2 lanes of one-way traffic at drop-off zone].
- Avoid "short cuts" or "by passes" to parent pick-up and drop-off areas.
- Provide curb cuts for handicapped accessibility.
- Provide signage to direct traffic.
- If drop-off is on street, ensure students can access sidewalk without exiting or crossing street traffic.

Vehicle Parking

Activities

- Parking for staff, parents, and volunteers.
- Event parking: consult with SPS Planning to determine if event parking should provide for concurrent events in the commons and the gymnasium, or for the commons only.

Space Requirements

- Number of parking spaces required by code, as adjusted by City of Seattle Departures process.

Spatial Relationships

- Locate parking as agreed with project-specific School Design Advisory Team (SDAT) and the School Traffic Safety Committee.
- Consider proximity toward main entrance of building.
- Provide accessible and visitor parking near main entry.
- Locate parking easily accessible for events in areas such as Gymnasium, Dining Commons, and Library/Media Center.
- Provide barrier from parking / drive to ballfields to prevent damage to fields.

Electrical, Plumbing & Mechanical Needs

- Provide adequate site lighting for safety.

Special Considerations

- Separate parking for staff and visitors, when feasible.
- Consider perimeter access control to manage parking during off-hours. Where feasible, provide gate at parking lot entries.

Transportation Services[3]

"**The school bus is the front door to the school for many kids**. If the bus experience has been chaotic, it takes, on average, 45 minutes to calm kids down, and they're not ready to learn."

- SPS interim Transportation Director Jeffrey Bronstein, Jan 2020

The Seattle Public Schools Transportation Department provides safe, efficient transportation to a variety of students attending SPS schools and programs. Transportation is provided via yellow school bus, as well as via contracts with private service providers using vans or private cars. For students who are not eligible for transportation, information on safe walk-zones is provided.

Policies & Procedures that Guide the Department's Work:

- Board Policies:
  - 6600 (Transportation)
  - 6620 (Special Transportation)
  - 6625 (Private Vehicle Transportation)
- Superintendent Procedures:
  - 6600SP (Transportation)

Minimum Ridership Standard for Middle Schools: [4]

Middle school students who live within the boundaries of the Seattle School District and who live more than 2 miles from their assigned school are eligible for district-arranged transportation. ORCA cards may be provided for students attending a school outside of their service area or linked service area if they live farther than 2 miles from the school.

Exceptions are allowed in the following areas:

- Students who require specialized transportation services as determined by their Individualized Education Plan.
- Students requiring medical transportation as approved by District Health Services.

Supplemental Service:

- Bus arrival and departure times for special education students receiving transportation will be the same as general education students unless specified differently by the student's IEP or 504 (American With Disabilities Act) plan.
- Special Ed Bus Drop-off: In 2020, SPS' Transportation Service Standards state: "Bus loading zones for special education buses may only be separate from general education buses when a legitimate, non- discriminatory reason exists and is documented by student's IEP or 504 plan for the student's safety or as determined necessary to meet the individualized disability-related needs of the student." However, the current Director of Transportation Services is recommending a change to a more student-oriented placement, so design teams should confirm with Transportation Services that SpEd (small buses) drop-off can & should be located nearest where intensive services are to be provided.

Arrival & Departure Times:

All middle school bell times start at 8:55 a.m. and end at 3:45 p.m.; bus arrival times are 8:40 a.m. and departure times are 3:55 p.m. For exceptions to standard check SPS Transportation Service Standards Appendix B.

Bus Drop-Off/Pick-Up Area

Activities

- Drop-off and pick-up students by school buses.

[3] Seattle Public Schools website: https://www.seattleschools.org/students/transportation
[4] Excerpted from SPS Transportation Service Standards 2019-20 effective 9/1/2019; website accessed October 2020.

Space Requirements

- Per the School Traffic Safety Committee design guide, on-site bus dropoff should be provided only when on-street bus dropoff is not feasible.[5]
- Site requirements will vary according to student assignment and program placement policies; confirm site-specific requirements with Transportation Services.
- Accommodate drop-off/pick-up for at least 3 standard 72-passenger buses, 3 small buses, 6 vans or private cars used by private service providers (equals the length of two full-size buses).
- Provide for end-to-end queuing for loading and unloading.
- Bus dimensions provided in Appendix "B".

Spatial Relationships

- Car, buses, and service vehicle entrances and traffic must be separated, if feasible.
- If necessary, bus traffic can be combined with service traffic.

Electrical, Plumbing & Mechanical Needs

- Provide adequate lighting for safety.

Special Considerations

- Provide clear area around bus for maneuvering.
- Provide concrete walkway wide enough to accommodate loading and unloading of all buses at one time [+/- 10' wide].
- Provide signage directing buses toward the front of the drop-off and directing alternative transportation providers behind the buses.
- Provide "Buses Only" signage to direct traffic or "Buses Only during the following times xx to xx" coordinate with Transportation department.

Future Projects – Site Specific Requirements

Design teams should confirm the below numbers and other site-specific requirements with SPS at the earliest possible stage of design.

- Mercer Middle School: Estimated bus usage at 1,000-student capacity accommodate: 4 regular size buses and 7 SpEd buses, if feasible.
- Aki Kurose Middle School: Estimated bus usage at 1,000-student capacity accommodate: 12 regular size buses and 8 SpEd buses, if feasible. Confirm with SPS transportation during site specific ed specs.
- Washington Middle School: Estimated bus usage at 1,000-student capacity accommodate: 9 regular size buses and 3 SpEd buses, if feasible. Confirm with SPS transportation during site specific ed specs.

Metro Bus Transportation

As of November 2021, the Mayor's Climate Action Executive Order expanded the City's ORCA Opportunity Program to provide free unlimited ORCA cards for Metro bus transportation to middle school students eligible for bus transportation. The program is intended to "encourage and empower students to use public transit to access schools and services, help reduce traffic congestion near schools, and build a better future for our youngest Seattlelites."[6]

Design teams shall review nearby Metro bus stop locations and pedestrian pathways serving each school with the Seattle Dept. of Transportation and King County Metro to determine if additional pedestrian safety considerations should be included in the project.

[5] Seattle School Traffic Safety Design Guide at www.seattle.gov/Documents/Departments/SDOT/SRTS/Traffic%20safety%20committee/BestPracticesforSchoolTrafficDesign.pdf

[6] "Seattle Dept. of Transportation blog at sdotblog.seattle.gov, accessed December 2021.

Distribution Services

SPS Distribution Services provides deliveries of:

- Equipment, materials and supplies from the District Warehouse
- Food service from the central kitchen
- Intra-district mail

Deliveries are made between the hours of 7:00 a.m. and 3:00 pm. At a 1,000-student middle school, the schedule of deliveries is typically:

- General freight deliveries: 1-2 times per week (every 3 days)
- Prepared food deliveries: daily
- Milk deliveries: 3 times per week
- Produce deliveries: 2 times per week
- Frozen food deliveries: once per week

There are 3 times more deliveries made for the kitchens than are made for other types of deliveries, as food is delivered every day. These are the only deliveries with a deadline, i.e., the food must be delivered to all the schools each morning in sufficient time to allow the kitchen staff to prepare it before the first lunch. They bring in cold food in tall, insulated boxes on casters each day. It is beneficial for those delivery paths to be short and efficient. However, the location of the loading dock should not be driving the location of the Kitchen/Servery/Dining Commons. The functional needs of Commons and spatial configurations that best support the school are the most important considerations. Service access and loading dock shall be adjusted as needed to support these primary spaces.

See section on Facility Operations for requirements for Central Receiving area, and Nutrition Services for requirements for accommodating daily food service deliveries.

Deliveries are done by one individual. When the driver releases the palletized materials (which weigh up to 400 lbs.) from the straps for securing them during transport, the freight rolls down toward the loading dock and one person cannot stop it. For safety, the grade must be level at the truck parking area adjacent to the loading dock.

The amount of time that an individual delivery requires varies from a few minutes up to an hour, depending on where and to how many locations within the building that the delivered items must be distributed. For efficiency, it is preferable if storage areas for materials and supplies such as books, office supplies, custodial supplies, extra furniture, and similar items, be located as close to the loading dock/receiving area as possible, if programmatic priorities do not require locations in other parts of the building.

Except for intra-district mail, the above deliveries must be accommodated at a service drive/loading dock (space requirements below).

Other delivery providers are typically accommodated through the school's main entrance, including:

- UPS, FedEx, and other commercial delivery providers
- United States Postal Service
- Intra-district mail delivery

It is desirable if a small load/unload zone near the main entry is provided for these daily deliveries.

In addition to the deliveries identified above, garbage, recycling and compost dumpsters must be accommodated at the service court/loading dock area. At a middle school, pickup frequency is typically:

- Garbage (8 cubic yard dumpster): ~ 3 times per week
- Recycling (8 cubic yard dumpster): ~ 2 times per week
- Compost (2 cubic yard dumpster): ~ 2 times per week

Service Court/Loading Dock/Dumpster Access

Activities

- Deliveries to Nutrition Services/Kitchen and Central Receiving.
- Filling and emptying of dumpsters, trash, recycling, and food waste/compost.

Space Requirements

- Adequate space for trucks making deliveries, including turning area. Whenever possible, the area shall be designed to accommodate two delivery vehicles at one time.
- Accommodating semi-trucks is unnecessary. Semi-trucks are typically used primarily for initial furniture and equipment deliveries to the building.
- Typical warehouse and kitchen delivery trucks dimensions and image see appendix "C".
- Locate away from all pedestrian traffic and play fields.
- Locate away from student areas to minimize disruption from noise and fumes.
- Building supply air intakes shall also be located at a distance from the service drive/loading dock to eliminate fumes from being brought into the building.

Electrical, Plumbing & Mechanical Needs

- Lighting for night use and security.
- Provide lockable, freeze-proof hose bib for washing down the loading dock and area around dumpsters.
- Provide hot and cold water in lockable can wash. Connect can wash waste piping to sanitary sewer system.
- Electrical transformers.
- Drainage at dock should be at a level that does not require a lift station.

Special Considerations

- Provide card reader and Aiphone to enable office to let SPS Distribution Services staff, or other outside vendors, to make deliveries.
- Parking for food service/maintenance staff panel trucks (4 spaces if feasible).
- Service Drive and Loading Dock
    - Design of Service Drive and Loading dock should accommodate 3 dumpsters and truck Loading / Parking
    - Dumpsters
        - Should be located an additional 36" from the 14' required for truck.
        - Rear loading dumpsters are preferred and should be flush up against the dock/bumpers for elevated loading docks
        - Should be located on a concrete pad which includes the area the truck needs to position itself properly. This eliminates long term asphalt damage.
    - Drive
        - Length of drive/turn area is 70' from dock.
        - Length of parking area at dock is 35' (to accommodate truck with life gate extended)
        - Slope of drive should be as close to level as possible.
        - Pitch of drive must be level.
        - Turning radius should accommodate both reverse driving of freight trucks and forward driving of Garbage Trucks.
        - Service drive/Loading dock should be painted and cross hatched "No Parking".
        - Curbs on both sides of service drive should be painted red for 10' to allow proper egress.
        - Loading area should have signage to restrict parking to designated people at designated times.
    - Dock
        - Height 48", Depth 12', Width 14'.
        - Dock should be sloped slightly away from building to keep water from puddling.

  - Pitch of dock must be level.
  - Dock Bumpers: 5/8" offset from top of dock (Not flush). No load levelers are needed.
- Receiving Area:
  - Receiving entry – double doors leading to hallway: it is preferred if receiving is on one side of that hallway, and kitchen on the other, or provide direct access to kitchen from loading dock.
  - Doors should be able to accommodate a 40" pallet. A pair of doors without center post are is preferred.
  - All panic door handles will have "dogs" to lock handles in the open position.
  - Freezer Doors on "Walk in Coolers" to be 35" in width. Floor of Freezer should be at the same grade as floor of the kitchen. Floor of walk ins should be load bearing for 2500 lb pallet with pallet jack.
  - All service doors interior and exterior including Kitchen, Custodial, and Dry Storage room doors should have threshold entrance ramps that meet 1:12 ADA slope requirement.
- Use of gratings at entries: Grates at entryway should be load-bearing so they are not damaged by freight deliveries; however, there should be no grates at the receiving / loading dock area.

Safety, Security, and Risk Management

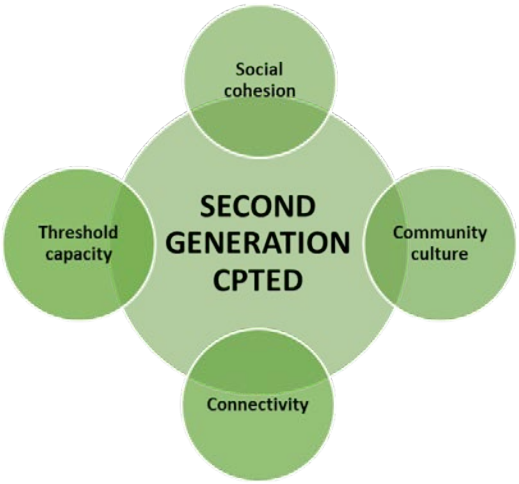
"We don't need more metal detectors; we need more kid detectors."[1] – Laurel Bear

Building Safety & Security

Many guidelines have been published on ways to design passive safety and protection measures into a building. Crime Prevention through Environmental Design (CPTED) strategies, which are introduced in the previous section "What Do We Want: Safety in the Midst of Transparency," aim to foster a culture of awareness that can "influence offender decisions that precede criminal acts by affecting the built, social and administrative environment."[2]

The principles of CPTED can benefit schools by:[3]

- creating a warm and welcoming environment
- fostering a sense of physical and social order
- creating a sense of ownership by students
- sending positive messages to students
- maximizing the presence of authority figures
- minimizing opportunities for out-of-sight activities
- managing access to all school areas



Guidelines for an Active Threat Response

In addition to principles of CPTED, federal guidelines on responses to an active threat also influence decisions about the design of the school environment. In June of 2013, the federal Departments of Education, Homeland Security, FEMA, Justice, and Health & Human Services jointly issued a "Guide for Developing High Quality School Emergency Operations Plans" which identifies Run-Hide-Fight as the best practice for school response to acts of violence such as an active shooter.[4] This is a shift from the more passive "lockdown and shelter-in-place" strategies that schools have practiced for the previous decades.

> Run - If it is safe to do so for yourself and those in your care, the first course of action that should be taken is to run out of the building and far away until you are in a safe location.
>
> Hide - If running is not a safe option, hide in as safe a place as possible. Students and staff should be trained to hide in a location where the walls might be thicker and have fewer windows.
>
> Fight - If neither running nor hiding is a safe option, as a last resort when confronted by the threat, adults in immediate danger should consider trying to disrupt or incapacitate the threat by using aggressive force and items in their environment, such as fire extinguishers, and chairs.

The younger the students, the more that running is de-emphasized and the more that hiding is emphasized. So even though the Federal guidelines recognize that leaving the site may be the safest action for older students in some situations, providing the building systems and elements for lockdowns is still an important strategy for protecting students and staff.

---

[1] Laurel Bear, Director of the Alhambra Unified School District student safety and services program, as quoted in EdSource article "Run Hide Fight is the new Mantra." by Jane Meredith Adams, July 26, 2013. Web: http://edsource.org/2013/run-hide-fight-new-mantra-for-schools-in-post-newtown-environment/36539

[2] International CPTED Association website, http://www.cpted.net/. Reference is the same for the CPTED diagram.

[3] Centers for Disease Control & Prevention website, CDC > Violence Prevention > Youth Violence > Environmental Design. http://www.cdc.gov/violenceprevention/youthviolence/cpted.html

[4] Federal Emergency Management Agency website, https://www.fema.gov/media-library/assets/documents/33599

Layers of Protection

Consideration should be given to using building elements, circulation paths and sightlines to create "layers of protection" within the school environment.

The first layers of protection are the site perimeter fencing, surveillance from inside to outside, a secure entry vestibule, and access management.

Site Perimeter and Secure Entry Vestibule

- No fencing is required or desired at the front of the school where it is preferred to present a welcoming presence, and where supervision of the main entry is maintained by central office staff.
- The decision as to whether to provide a secure perimeter fence for a middle school should be made on a site-specific basis, depending on considerations such as the neighborhood context, adjacent arterial traffic, and/or the needs of some students for a protected outdoor activity.
- Field fencing is primarily to keep balls on the site and to manage crowds during sporting events, by keeping them either in or out as appropriate to the event.
- A secure entry vestibule shall be provided at the main entry; it shall be configured in a manner that requires site visitors to enter the main office and check in prior to accessing the school.

Sample Secure Entry Vestibule

External Surveillance and Supervision

- The placement of site elements such as parking, pathways, landscaping, lighting, the flagpole, and signage should all work together to lead visitors to the main entrance that is monitored by the Administrative Office staff when school is in session.
- Doors and windows should be placed to optimize sightlines for students and staff to see visitors approaching and to provide supervision of activities outside the building.
- Roller shades shall be provided on all exterior windows where occupants may be viewed from outside.
- Specify plantings that do not allow for concealment (see SPS Technical Building Standards).
- When views are impeded, supplement with cameras:
    - Primarily for daytime use while staff and students are present, but also for afterhours general property security, also provide at "dead zones" and stairways.
    - Use low light cameras and motion sensor lighting (see SPS Technical Building Standards).

Access Management

- From exterior to interior, and from interior hallways into classrooms.
- Card Readers
  - Provide (2) located at: (1) Custodial entry and (1) main teacher entry for afterhours access.
  - Provide (1) at each elevator lobby to allow selective elevator access.
- AiPhone
  - Provide (1) at main building entrance to call in for entry into building.
  - Provide (1) at custodial entry for delivery services to gain access to Receiving.
- Locks
  - Classroom-side "thumb-turn" locks should be specified to enable locking down all teaching spaces from the inside so that staff are not exposed to a threat while securing their spaces.
  - Review with District locksmith.

Internal Surveillance and Supervision

- Inside the building, design corridors with good sight lines for ease of supervision.
- Provide generous amounts of interior windows (relites) connecting all student-occupied spaces to provide the transparency emphasized in the section entitled "What Do We Want – Safety in the Midst of Transparency."
- It is strongly preferred that relites are placed above 36" so that wall space for casework, bookcases, and other educational furnishings and equipment is optimized.
- Roller shades shall be provided on all internal windows where occupants may be viewed from common areas that would be accessible to an intruder.
- Cameras
  - Primarily for daytime use while staff and students are present, but also for afterhours general property security, also provide at "dead zones" and stairways.
  - Use low light cameras and motion sensor lighting (see SPS Technical Building Standards).

Protection for Large Gathering Spaces

In many incidents of school violence, students have been targeted in the school's central gathering place, i.e. the student dining area/commons. While students may be "locked down" in classrooms, students in the dining area and other commons areas may not be able to get to classrooms before they are locked. First and foremost, sufficient exit pathways must be provided so students can quickly exit the space/building to escape the threat. Secondly, provide opportunities for sheltering-in-place in a concealed area where feasible.

Other examples of measures include:

- Orient the student commons/dining area so it is not directly visible from the main entry to the school.
- The commons could be designed to be a space that can be secured, with lockable doors.
- The servery next to the commons could provide an area for students to hide if it can be secured (i.e. with a solid roll-down door)
- Consider spaces adjacent to the commons that could shelter a significant number of students and be secured, if space had sufficient egress that students could exit if needed.

In addition to creating passive layers of protection, other more active security features that can be incorporated into the design:

Lighting

- Provide adequate lighting throughout the building.
- Provide security lights for access and egress during early morning, after school and evening activities.
- Security lights should be independent from other building lighting, with switching that allows use only in needed areas. Example: If only parking lot and front door lighting is needed one evening, switching does not include all hallways and rear exterior doors.

Security Office

- Typically have (1) security officer at every middle school.
- Provide 3 workstations: one specifically devoted to cameras, one for the assigned specialist, and one for visiting staff.
- Provide file cabinet.
- Provide area to meet with a student
- Need to be able to pull in witnesses discreetly so they remain anonymous.
- Locate near a shared use conference room to be able to separate people into different rooms.

Theft/Vandalism

- Bicycles and electronics are most stolen items.
- Provide bike racks in a visible location near one or more main entries.

Outdoor Learning & Gathering Spaces

- Locate where buffered from public access, traffic, noise, and inclement weather, whenever feasible.

Personal Safety & Security

Seattle Public Schools will be physically and emotionally safe and secure for all students, staff, and visitors. Seattle Public Schools has a no tolerance policy towards weapons on its campuses and at District-sponsored activities.[5]

Bullying

Bullying includes direct or indirect electronic, written, oral or physical acts which physically harm a student, substantially interfere with a student's education, threaten the overall educational environment and/or substantially disrupt the operation of school. Bullying most often occurs during transition times in hallways and stairways. Deterrents to bullying include:

- Building a positive school climate through providing a warm and welcoming environment.
- Providing plenty of transparency that supports natural/passive surveillance
- Providing active surveillance such as cameras in stairways.
- Providing all gender toilet rooms that minimize threats to non-binary persons.

Emergency Preparedness

In the event of either a natural disaster or human-caused incident, it is the responsibility of the District, and individual schools/sites to provide the emergency organization and resources to minimize student, staff, and school community loss of life, protect school district property, continue essential functions, and return to the business of education in a timely manner.

Policy 3432 directs all schools to develop a comprehensive all hazard emergency management plan. It is the principal's responsibility to submit a School Site Emergency Management Plan document to the District Safety and Security Office each fall. This includes plans for student/family reunification, a listing of staff assignments and responsibilities during an emergency, location of disaster supplies, verification of principal's completion of FEMA training, and more.

All schools are required to comply with emergency drill requirements. Emergency drills teach students the following basic functional drill responses[6]:

1. Shelter-in-Place: Students will receive instruction so that in the case of community violence or a hazardous vapor release that does not allow time to evacuate the campus, they will be able to remain inside, and take the steps necessary to eliminate or minimize the health and safety hazard.

2. Lockdowns: Students will receive instruction so that in the event of the breach of security of a school building or campus, staff, students, and visitors will be able to take positions in secure enclosures.

3. Evacuations: Students will receive instruction so that in the event the school or district needs to be evacuated due to

[5] SPS website on "Safety & Security at Seattle Public Schools", September 2020.
[6] Seattle Public Schools Board Policy 3432 Emergencies.

threats such as fires, oil train spills, or tsunamis, they will be able to leave the building in the shortest time possible and take the safest route possible to another school or facility.

4. Earthquake: Students will practice the state-approved earthquake safety technique 'drop, cover, and hold'.

These safety-related drills should also include a reverse evacuation drill, as recommended by SPS Safety and Security, teaching students how to get back inside a building quickly. This drill may be combined with a shelter-in-place or lockdown drill.

Emergency Preparedness & Response: Program Requirements

1. Seismic Importance Factor: SPS has required an elevated Seismic Importance Factor of 1.5 in structural design for some portions of new buildings, to enhance their serviceability as an emergency facility after a seismic event. See SPS Technical Building Standards for further information.
2. Emergency Evacuation Assembly Area and Building Egress: On any site that has a play field, it typically functions as the evacuation assembly area. Design teams shall provide ADA accessible egress routes to the playfield from all the buildings. If the school does not have a playfield, design teams should request the district specify the location of the assembly area so that safe/accessible egress and routes can be provided.
3. Emergency Supplies Storage: 8' x 10' with double door
   - Should be well-ventilated, protected from rain, and have wide doors.
   - Prefer location near the large spaces. For example, the Red Cross would use the gym space.
   - Do not locate near main gas shut off.

   Storage area should be sized as follows:

   - Provide sufficient water and supplies for full student population for 3 days, based on this guideline: at end of each 24 hours, half of the students will remain on site. So, for a 1000 student middle school, end of day one: 500 students, end of day two: 250 students; end of day three: 125 students. Provide enough storage for 875 (500+250+125=875) for a single days' worth of water and supplies.
   - Design the hot water system to gravity feed to a spigot, as circulation pumps will not be operating. Depending on the capacity of the hot water system, this could provide a substantial portion of the required water supply and avoid the need for storing water where it might be subject to freezing. Design team to provide an estimate of the capacity of the hot water system to determine need for storing water.
4. Single Backpack Kits are provided within classrooms.
5. Emergency Equipment Storage: Based on the geography of the city, the Seattle Office of Emergency Management thinks of the city as three islands, so there would be a benefit to having equipment strategically stored around the school district. Confirm with SPS Safety & Security whether the site will be a regional storage site.
6. Continuity of Operations: Confirm with SPS whether a back-up generator should be provided to maintain continuity of operations for:
   - Emergency lighting
   - MDF room (or location with main telecommunications system)
   - Fire alarm system
   - Essential electrical services: fire alarm systems, security cameras & motion detectors, & access management systems
   - Refrigerator(s) and freezer in the main school kitchen
7. First Responder Vehicle Queueing
   - Flagpole is the point of reference for all first responders.
   - Need easy access to emergency evacuation assembly area, with ability to line up vehicles.
8. Elevator/Areas of Refuge
   - Elevator should be sized to fit a gurney.
   - Provide areas of evacuation assistance. SPS focus is on getting people to the areas of evacuation and then trained (fire

department) personnel carry them from there.
- Design teams should request any site-specific requirements for special needs populations at each school.

9. Emergency Medical Equipment: Provide location(s) for mounting defibrillators centrally within each building where an assembly occupancy is located, where they can be accessed at any time. Defibrillators to be provided from furniture & equipment budget.

10. Emergency Evacuation and 'Important Locations' Maps: At Substantial Completion of construction, design teams shall provide the following maps to be incorporated into the school's Emergency Management Plan.

    - The Evacuation map should have arrows showing the egress routes out of buildings. Any maps to be posted publicly should show only the evacuation directions, not the Emergency Evacuation location(s).
    - The Important Locations Map should show the shutoffs for water and gas, the electrical master power switch and panel, fire extinguishers and fire hydrants, AEDs, aid equipment, stoves, HVAC equipment, chemical storage, hazardous materials, emergency supplies, exterior water, and power sources, along with similar items. The purpose of this map would be to have a quick reference for first responders and others about dangerous areas or important resources during an emergency, especially if the custodian is not available. See Appendix "D" for example.

Risk Management[7]

Risk Management identifies risks to the achievement of Seattle Public Schools' strategic objectives and assists district leaders at all levels to develop effective strategies for mitigating the risks they own. Risk Management partners with schools to assist in improving safety for students, staff, and visitors. Each school has an assigned Safety Partner based on the region in which it is located.

The District works with school-based safety committees to help them address hazards, provide access to safety training resources, and participate in conducting periodic safety inspections.

Team members also serve as resources in areas of environmental health and safety (indoor air quality, drinking water quality, lead, asbestos, and hazardous chemicals). Team includes a Certified Playground Safety Inspector and an ergonomics specialist.

The District's Risk Manager advises that very few claims over the years have been because of facilities. Until these issues are integrated into the updated SPS Technical Building Standards, priorities for design team attention would be:

- Site design: good sightlines for supervision.
- Site design: clear separation of bus, vehicle, and pedestrian zones.
- Secluded areas: The layout of spaces should not set up situations wherein 2 or more students, or a student and staff member, can easily be together in an unsupervised space, such as a storage room accessed only from inside a classroom, or a custodial closet accessed only from inside a toilet room.
- Stairwells: Bullying incidents can be encouraged by areas that are not easily supervised; interior open stairwells support better supervision.
- Seismic reinforcing: All bookcases, wardrobes, and other non-permanent casework shall be secured for earthquake prevention with appropriate clips, brackets and/or straps as needed. Provide blocking at any locations where such items might reasonably be anticipated.
- Career and Technical Education equipment placement: CTE areas that require supervision by a single staff person should not be segregated into sub-areas that are difficult to supervise. The placement of equipment must provide for safety zones around each piece of equipment.
- "Climbing" walls: SPS allows the use of horizontal traverse walls not greater than 8' in height. They must incorporate a means of securing them from use when not actively supervised. The preferred means of protection is padding that, in the "open" configuration, is providing fall protection on the floor, and in the "closed" configuration is securing the wall from unsupervised use.
- Bleachers should have covers on the sides to prevent people from accessing underneath them when they are open.
- Gymnasiums: No control boxes or other devices that can cause injury should protrude from the walls.

[7] Language in first three paragraphs of this section excerpted from SPS website on Risk Management, September 2020.

General Education

We have learned from the research overview that middle schools should be divided into smaller groupings, with teams of teachers as the underlying organizational structure. In the post-occupancy evaluations for SPS middle schools, principals that have schools with double-loaded corridors expressed a strong preference for organizing around smaller interdisciplinary teams. And the Denny Middle School principal affirmed that neighborhoods of 4 to 6 classrooms are sufficiently flexible to fit a variety of teaming models, including interdisciplinary, or grade level/content areas.

The SPS Elementary and High School Educational Specifications also recommend academic neighborhoods of this size.

We have also learned from the post-occupancy evaluations, as well as from the Director of Continuous Improvement, that far more small group spaces are needed; both open and enclosed spaces, for groups up to 6 working with an adult, for one-on-one support, as well as for groups of students working together.

So, it is recommended that the General Education classrooms be organized into six Academic Neighborhoods, each consisting of:

- 4 General Education Classrooms
- 1 Full-Size or 2 Half-Size "Flex" Classrooms
- 1 Science Lab
- 1 Small Group Collaboration Space
- 1 Neighborhood Learning Commons

Additional "MTSS Breakout Rooms" shall be distributed within the Academic Neighborhoods.

In addition, we know we can better serve students by providing a greater variety of spaces and places for formal and informal learning activities. Not just academic, but social spaces too.

Social Connections

"Young adolescents have a strong need to belong to a group—with peer approval becoming more important as adult approval decreases in importance."[1]

"Friendships, positive peer relationships, and social interactions can boost young adolescents' self-esteem."[2]

So, integrating social spaces throughout the middle school is critical to creating the positive environment that students need. The beauty of community spaces is that they blur the lines between academic and social spaces**.**

Activities of all types occur in

[1] Scales, P. C. (2003). Characteristics of young adolescents. In National Middle School Association, This We Believe: Successful schools for young adolescents . Westerville, OH: National Middle School Association, pp. 43–51.
[2] Manning, M. L. (2002). Developmentally appropriate middle level schools (2nd ed.). Olney, MD: Association for Childhood Education International, p. 32.

these places: from individual work or personal reflection to small groups socializing or working on a project together. The range of activities and variety of social dynamics at play reveal a level of comfort that people feel in such spaces. With comfort comes connection.
It is important to dedicate space to a variety of types of community spaces distributed throughout the school, including:

- Open learning commons spaces at the center of each academic neighborhood of classrooms and labs.
- Enclosed, but transparent & able to supervise small group collaboration spaces distributed among classrooms both within, as well as outside of, the Academic Neighborhoods.

Activities for Instructional Spaces

Academic Neighborhoods

General Education Classrooms

Students can:

- Listen to lectures and presentations by teachers or other presenters.
- Learn about mathematics, literature and language arts, history, and social studies.
- Participate in large and small group discussions.
- Perform analysis and calculations, as individuals, 2-person teams, or in small groups
- Write observations and conclusions.
- Prepare and present within small groups, or to the whole class.

Science and Health Education Classroom: See "What Do We Do: Science and Health Education"

Learning Commons

Students can:

- Engage in individual study or reflection.
- Participate in small group discussions.
- Work on individual or small group projects
- Socialize and build relationships with their peers

Small Group Collaboration Spaces

Students can:

- Engage in individual study or reflection.
- Participate in small group discussions that might disrupt others in the academic neighborhood.
- Work on individual or small group projects
- Practice small group presentations

MTSS Breakout Spaces

Students can:

- Engage in individual study or reflection
- Work 1:1 or in small groups with an adult
- Participate in small group discussions that might disrupt others in the academic neighborhood
- Work on individual or small group projects

Flex Classrooms

Intended to accommodate classes and programs that may vary in size and participation from year-to-year, such as:

- English Language Learners/Bilingual Education
- Additional grade-level classrooms that may be needed as grade-level cohorts vary in size from year-to-year.

- Additional programs or small class sizes that are generated by grant funding sources.

Other General Education Classrooms

World Language Classrooms

Students can:

- Listen to lectures and presentations by teachers or other presenters.
- Learn about other cultures.
- Practice reading, speaking, and writing in other languages.
- Participate in large and small group discussions

World Language Teaching Kitchen

Students can:

- Learn about other cultures through the lens of the foods they grow and eat and the rituals and celebrations they share.
- Observe food preparation and share in occasional special meals to supplement their understanding of a culture (i.e., it is not intended that the teaching kitchen can accommodate an entire class of students preparing food; rather, an adult may prepare food while students observe, and students may partake in the adjacent Student Dining space)
- The Community Kitchenette is intended to serve for this purpose when it is possible to configure it so that a larger group of students can observe food preparation.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Academic Neighborhoods						
General Education Classrooms, including Language Arts, Social Studies, Math	1	Up to 30	24	24	900	21,600
Flex Classrooms, Full Size	1	Up to 30	1	1	900	900
Neighborhood Learning Commons	-	varies	-	6	600	3,600
Small Group Collaboration Spaces	-	Up to 8	-	6	200	1,200
Display	-	-	-	6	50	300
Book & Technology Storage	-	-	-	6	100	600
Other General Education Classrooms						
World Language	1	Up to 30	3	3	900	2,700
World Language Teaching Kitchen*	-	-	-	-	-	-
School-wide Resource						
Small Group Collaboration Spaces	-	Up to 8	-	1	200	200
MTSS Breakout Rooms - Distributed	-	Up to 6	-	4	120	480
Student Lockers (includes added hallway width to access lockers)				1	Allow	1,800
Required Subtotal			**28**			**33,380**

T.S. = Teaching Station

* Utilize Community Kitchenette adjacent to student commons / dining

** Science and Health Classrooms are included in Academic Neighborhoods. See “What Do We Do: Science and Health Education” for program requirements, activities, spatial and adjacency descriptions.

*** Student lockers are included in “What Do We Do: Student Lockers”

Spatial Descriptions

While several traditionally sized classrooms are needed to accommodate many of the academic disciplines described in the Curriculum Overview, a greater variety of settings to accommodate a variety of activities and groups sizes is recommended. Providing a greater variety of spaces and places for both formal and informal learning activities will better serve students. These should be distributed among the traditional classrooms to support break-out learning activities and small group collaboration.

So, the suite of general learning spaces is expanded to include spaces that support collaboration among students, as well as among students and staff, adult mentors, and community partners:

General Education and Flex Classrooms

- Accommodate up to 32 students at 2-person worktables and one teacher with a presentation station and a workstation.
- These spaces are intentionally sized and configured to be interchangeable with most of the other classrooms within the school so that there is flexibility to deliver any program or Special Education services wherever it is most appropriate.
- The teaching wall is located on the longest wall.
- A de-escalation niche at least 4' long x 2' deep should be included in every classroom; see "What Students Tell Us."
- With many textbooks available digitally, minimal storage is needed in classrooms.
    - Full height cabinets 4' wide x 2' deep are adequate for math and English/Language Arts
    - A teacher wardrobe cabinet should also be provided in each classroom or lab. (See Appendix "G")

Neighborhood Learning Commons

- Accommodate a few small breakout groups at one time, spaced sufficiently apart that students are not a distraction to one another.
- These open, flexible spaces will be located so they can be a shared resource to a neighborhood of classrooms and are intentionally sized so that they are not likely to be converted to dedicated classrooms, which would remove this important shared resource.
- It is critical that these are located directly adjacent to the classrooms where adults in those classrooms can provide supervision of the shared spaces.

Small Group Collaboration Rooms

- Accommodate groups of up to 8.
- These enclosed spaces are intended to accommodate small group activities that require acoustical separation for confidentiality or to minimize distraction to others.
- Have generous interior windows facing the learning commons or hallways so that passive supervision from a variety of directions can occur.

MTSS Breakout Rooms

- Provide additional spaces for working 1:1, or with small groups of students.
- Have generous interior windows facing the learning commons or hallways so that passive supervision from a variety of directions can occur.

Display Spaces

- Dedicated spaces to celebrating student work within the academic neighborhoods to supporting achievement and a create a positive culture.

Further, consideration should be given to areas typically not considered as "learning environments." A substantial quantity of building area is typically given over to circulation; hallways that have less traffic can provide opportunities for small niches and benches where students can be away from the largest crowds. Too often, spaces in schools are only scaled for large groups; however, the learning commons, portions of the library, and other spaces can be configured to create small-scale places for one or two students to talk or just to think.

Adjacency Descriptions

General

- To break down the scale of a large school, General Education Classrooms and Labs should be located within academic neighborhoods of approximately six teaching stations.
- In Site-Specific Ed Spec process, consider whether one pair of classrooms within each of the academic neighborhoods should be connected to support interdisciplinary integration. (See section "What Do We Know – Integration of Disciplines" for discussion on the means of that connection).

Academic Neighborhood

- Each neighborhood should be clustered around a single Learning Commons, or if desired, the Learning Commons space can be subdivided into two spaces so that each classroom has direct proximity and good sightlines into at least one Learning Commons.
- Spaces distributed around the Learning Commons:
    - (4) General Education Classrooms
    - (1) Science Classroom
    - (2) Small Flex Classroom or (1) Large Flex Classroom
        - Three of the Academic Neighborhoods shall have one Full Size Flex Classroom, and three of the Neighborhoods shall have a pair of Half-Size Flex Classrooms.
    - (1) Small Group
    - (1) Book Storage
    - Display
- Science Prep should support (2) Academic Neighborhoods and be adjacent to both science rooms.
- Student lockers are loud and disruptive and shall not be located within the Academic Neighborhoods.

The Learning Commons

- Shall be configured to:
    - support individual and small group activities, as well as occasional large group presentations.
    - have optimum sightlines from classrooms associated with it to support supervision of student activities.
    - have an exterior wall to provide daylighting and views that encourage the use of the space for breakout learning.
    - have direct access to the outdoors when feasible.

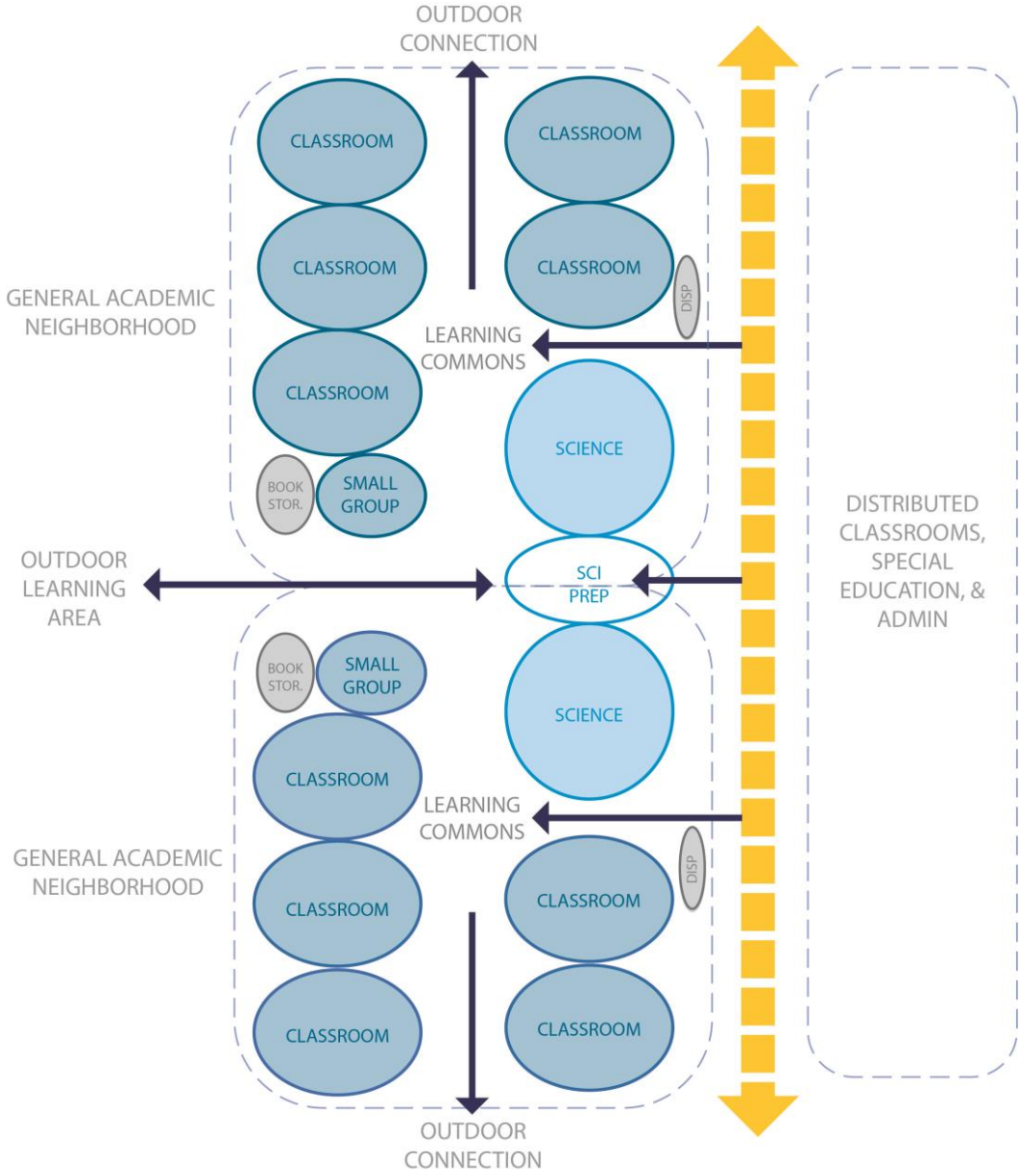
Small Group Collaboration Rooms shall have large interior windows facing at least two directions and be located with sightlines from nearby classrooms or an active hallway, so that activities within them can be supervised.

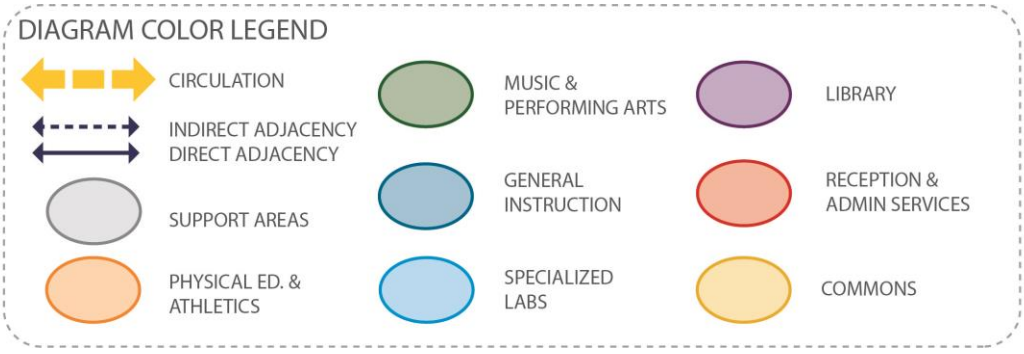
MTSS Breakout Rooms shall have large interior windows facing at least two directions and be located with sightlines from nearby classrooms or an active hallway, so that activities within them can be supervised.

Book & Technology Storage should be located for convenient daily access.

Display Area should be placed where student work can best be shared and celebrated.

Adjacency Diagram





Science and Health Education

Science & Health Education Are Integrated

At Seattle Public Schools Health Education is integrated into the Science curriculum, so programs, learning standards, and curriculum will be discussed for both programs within this section.

Science Program Overview

Our Goal is for all our students to be scientifically literate.[1]

Our mission is to do our part in providing all SPS K-12 science classrooms with a common Next Generation Science Standard-aligned core scope and sequence that is engaging, authentic, culturally relevant, rigorous, and technology-based in order to provide EVERY child with equitable opportunities to become critical thinkers, problem solvers, and independent learners in science.[2]

Washington State Science and Learning Standards[3]

The Next Generation Science Standards (NGSS) are a set of standards that provide consistent science education through all grades, with an emphasis on engineering and technology. Washington State formally adopted the NGSS on October 1, 2013. In our state, the NGSS will be called the Washington State Science and Learning Standards (WSSLS).

The WSSLS describe - at each grade from kindergarten through fifth grade, at middle school and at high school -- what each student should know in the four domains of science: physical science; life science; earth and space science; and engineering, technology, and science application.

The new standards will help students become literate in science. They will have the skills and knowledge to tackle issues like water and energy conservation. The WSSLS are aligned to the Washington State Mathematics and English Language Arts Learning Standards (Common Core State Standards). When students are learning about science, they are also enhancing their skills in reading, writing and math.

Please refer to previous section "What Do We Know – Adoption of NextGen Science Standards" for a complete overview.

Examples of the Science Standards for Middle School

The following examples demonstrate how the Standards weave together broad ideas within the disciplines of science and engineering, and with Common Core State Standards in Mathematics and English Language Arts. They illustrate **the importance of integrating the Science labs alongside General Education spaces** within the Academic Neighborhoods of the school.

Earth-Space Science[4]

- Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.
- Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.
- Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.
- Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

[1] From Seattle Public Schools website: Academics > Curriculum > Science.
[2] Ibid.
[3] From OSPI website: http://www.k12.wa.us/Science/NGSS.aspx
[4] Next Gen Science Standards at nextgenscience.org, October 2020.

Life Science[5]

- Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
- Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.
- Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.
- Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

Engineering, Technology & Applications of Science[6]

- Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
- Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
- Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

Learning Progressions

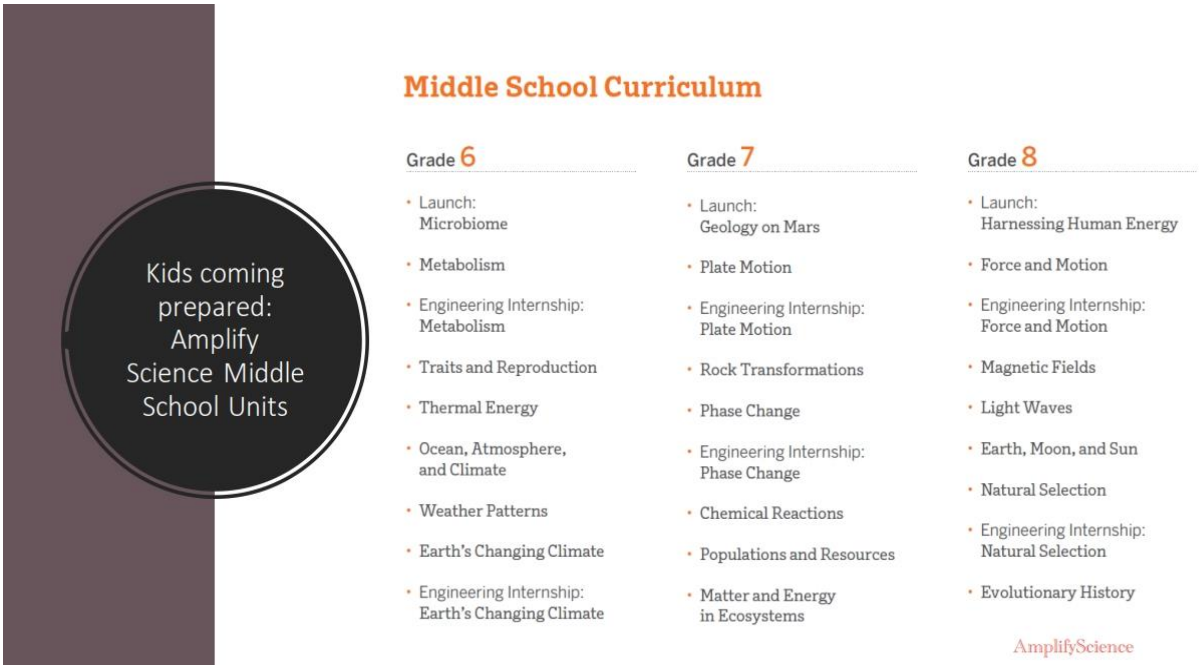
		Life Science	Earth & Space Science	Physical Science	Engineering
Elementary School	K	K-LS1 From Molecules to Organisms: Structures and Processes	K-ESS2 Earth's Systems K-ESS3 Earth and Human Activity	K-PS2 Motion and Stability: Forces and Interactions K-PS3 Energy	K-2-ETS1 Engineering Design
	1	1-LS1 From Molecules to Organisms: Structures and Processes 1-LS3 Heredity: Inheritance and Variation of Traits	1-ESS1 Earth's Place in the Universe	1-PS4 Waves and Their Applications in Technologies for Information Transfer	
	2	2-LS2 Ecosystems: Interactions, Energy, and Dynamics 2-LS4 Biological Evolution: Unity and Diversity	2-ESS1 Earth's Place in the Universe 2-ESS2 Earth's Systems	2-PS1 Matter and Its Interactions	
	3	3-LS1 From Molecules to Organisms: Structures and Processes 3-LS2 Ecosystems: Interactions, Energy, and Dynamics 3-LS3 Heredity: Inheritance and Variation of Traits 3-LS4 Biological Evolution: Unity and Diversity	3-ESS2 Earth's Systems 3-ESS3 Earth and Human Activity	3-PS2 Motion and Stability: Forces and Interactions	3-5-ETS1 Engineering Design
	4	4-LS1 From Molecules to Organisms: Structures and Processes	4-ESS1 Earth's Place in the Universe 4-ESS2 Earth's Systems 4-ESS3 Earth and Human Activity	4-PS3 Energy 4-PS4 Waves and Their Applications in Technologies for Information Transfer	
	5	5-LS1 From Molecules to Organisms: Structures and Processes 5-LS2 Ecosystems: Interactions, Energy, and Dynamics	5-ESS1 Earth's Place in the Universe 5-ESS2 Earth's Systems 5-ESS3 Earth and Human Activity	5-PS1 Matter and Its Interactions 5-PS2 Motion and Stability: Forces and Interactions 5-PS3 Energy	
Middle		MS-LS1 From Molecules to Organisms: Structures and Processes MS-LS2 Ecosystems: Interactions, Energy, and Dynamics MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and Diversity	MS-ESS1 Earth's Place in the Universe MS-ESS2 Earth's Systems MS-ESS3 Earth and Human Activity	MS-PS1 Matter and Its Interactions MS-PS2 Motion and Stability: Forces and Interactions MS-PS3 Energy HS-PS4 Waves and Their Applications in Technologies for Information Transfer	MS-ETS1 Engineering Design
High School		HS-LS1 From Molecules to Organisms: Structures and Processes HS-LS2 Ecosystems: Interactions, Energy, and Dynamics HS-LS3 Heredity: Inheritance and Variation of Traits HS-LS4 Biological Evolution: Unity and Diversity	HS-ESS1 Earth's Place in the Universe HS-ESS2 Earth's Systems HS-ESS3 Earth and Human Activity	HS-PS1 Matter and Its Interactions HS-PS2 Motion and Stability: Forces and Interactions HS-PS3 Energy HS-PS4 Waves and Their Applications in Technologies for Information Transfer	HS-ETS1 Engineering Design

[5] Ibid
[6] Ibid

Science Curriculum[7]

The science curriculum represents a shift in pedagogy towards three-dimensional learning described in the NGSS. Historically, science teaching has been focused primarily on content, but NGSS recognizes that 21st century skills involve a deep understanding of Science and Engineering Practices, Disciplinary Core Ideas (content), and Crosscutting Concepts that apply to all scientific disciplines. This shift in practice moves toward a pedagogy that focuses on "figuring out instead of telling about." In order to do this, **units are centered around puzzling scientific phenomena that are relevant to students' lives**. Students are then led through a series of activities that help them understand the science around the phenomenon.

Below are the primary content "units" covered by the science curriculum at each grade level.



[8]

Health Education Program Overview

The purpose of health education is to develop health-literate students—students who acquire the knowledge and possess the skills needed to engage in meaningful and health-enhancing lifetime behaviors. The 2016 Health Education K–12 Learning Standards provide schools with a foundation for implementing standards-based, age-appropriate instruction for each student.[9]

Washington State Health Education Learning Standards

Health Education standards were previously embedded in the Health and Fitness Essential Academic Learning Requirements (EALRs). However, because health education and physical education are different content areas, in 2016 Washington State adopted separate Health Education K-12 Learning Standards.

The standards provide concrete expectations for health education, which include:

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

[7] SPS Science Curriculum webpage, accessed October 2020.
[8] Summary of Middle School Curriculum from Amplify Science, open source document.
[9] This section adapted from "Introduction to the Health Education K-12 Learning Standards," OSPI website > Student Success > Resources by Subject Area > Health & Physical Education > K-12 Learning Standards, accessed November 2020.

Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
Standard 3: Students will demonstrate the ability to access valid information and products and services to enhance health.
Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.
Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.
Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.

Health Education Curriculum

The standards and outcomes are organized by grade. Many topics are consistent across grade levels, whereas other topics change between elementary, middle, and high school as more complex skills and abilities replace more basic skills and concepts. In most cases, the topics represent one or more grade-level outcomes for each standard. The topics for each standard are listed below, by grade level.

Core Idea	Elementary School (Grades K–5) Topics	Middle School (Grades 6–12) Topics
Wellness	1. Dimensions of Health 2. Hygiene 3. Disease Prevention 4. Analyzing Influences 5. Access Valid Information 6. Communication 7. Decision-Making 8. Goal-Setting	1. Dimensions of Health 2. Disease Prevention 3. Analyzing Influences 4. Access Valid Information 5. Communication 6. Decision-Making 7. Goal-Setting
Safety	1. Injury Prevention 2. First Aid 3. Violence Prevention	1. Injury Prevention 2. First Aid 3. Violence Prevention
Nutrition	1. Food Groups and Nutrients 2. Beverages 3. Label Literacy 4. Caloric Intake and Expenditure 5. Disease Prevention 6. Nutritional Planning	1. Food Groups and Nutrients 2. Beverages 3. Label Literacy 4. Caloric Intake and Expenditure 5. Disease Prevention 6. Nutritional Planning
Sexual Health	1. Anatomy and Physiology 2. Growth and Development 3. Reproduction 4. HIV Prevention 5. Self-Identity 6. Healthy Relationships	1. Anatomy, Reproduction, and Pregnancy 2. Puberty and Development 3. Self-Identity 4. Prevention 5. Healthy Relationships 6. Washington State Laws
Social Emotional Health	1. Self-Esteem 2. Body Image 3. Stress Management 4. Expressing Emotions 5. Harassment, Intimidation, & Bullying	1. Self-Esteem 2. Body Image and Eating Disorders 3. Stress Management 4. Expressing Emotions 5. Harassment, Intimidation, & Bullying 6. Emotional and Mental/Behavioral Health

Substance Use and Abuse	1. Use and Abuse 2. Effects 3. Prevention 4. Expressing Emotions	1. Use and Abuse 2. Effects 3. Prevention 4. Treatment 5. Legal Consequences

Activities

Science Labs

Students can:

- Listen to lectures, presentations and observe demonstrations by teachers and students, in large and small groups
- Participate in large and small group discussions
- Conduct investigations and testing, individually and in small groups
- Develop models and simulations, individually, in small groups, or in large groups
- Conduct engineering and testing design
- Engage in clean, dry, small-scale fabrication, including electronics, robotics or similar types of fabrication activities
- Conduct investigations and experimentation requiring the use of wet materials, as well as sinks for cleanup of activities, but not requiring the use of corrosive chemicals.
- Perform analysis and calculations, as individuals or in small groups
- Write observations and conclusions

Science Prep/Storage:

- Staff can set up materials and equipment for student investigations and experimentation.
- Materials and equipment are stored in this space when not in use.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Science Lab	1	Up to 32	6	6	1,350	8,100
Shared Science Prep & Storage	2	-	-	3	300	900
Central Science Kit Storage	-	-	-	1	260	260
Required Subtotal			**6**			**9260**

T.S. = Teaching Station

Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities.

Spatial Descriptions

With the integration of the Science and Health Education curricula, no dedicated spaces are required for Health Education. Either General Education classrooms or science lab spaces can be utilized for Health Education; the number of classrooms provided has been calculated based upon total student capacity and typical space utilization, so there should be sufficient teaching space to accommodate this program within the total number of classrooms and labs.

Science Lab

- A classroom/lab environment that accommodates all the activities indicated above.
- Perimeter casework can be fixed.
- Lab tables and other furnishings shall be mobile to allow for a variety of large and small group configurations.
- Lab tables shall have chemically resistant plastic laminate tops. The chemicals used in middle school labs do not require epoxy tops, and they are too heavy to be easily movable.
- Pairs of lab tables should be sized so they are readily movable.
- Lab tables will be grouped so they can accommodate up to 16 pairs of students, or up to 8 teams of four students working together.
- Groupings of tables can be placed perpendicular to the teaching wall so that all students can see it, or "docked" against the perimeter casework if a lab setup requires the tables to be near the sinks.
- Eight sinks shall be provided in the perimeter casework, spaced so that teams of 4 students can access them from their pair of lab tables. Design teams shall provide layouts that demonstrate that sink spacing allows for this.
- With the introduction of the new curriculum, students will lead their own investigations. There is no longer a need for demonstration tables at the front of the science classrooms.[10]
- With the issuance of student laptops at the ratio of 1:1, no additional desktop devices or monitors must be accommodated. Sufficient countertop space shall be provided so that laptops are convenient for use, but far enough from sinks that water does not damage them.
- Provide eyewash and shower only as noted in the following Space Features table.[11]

[10] Middle School Ed Specs meeting with Science Program Manager, 10/27/20.
[11] Ibid.

Science Prep/Storage See Space Features table below.

SPACE FEATURES CATEGORY	Space Features[12]	Middle School Lab
Casework at Labs	Perimeter base casework at 34" high Base cabinets with interior shelving space to accommodate 16 tote trays for lab partners, all in one cabinet. Tote trays 10" w x 12" l x 4" h. Upper cabinets, doors not necessary. Fixed demonstration table	~ 60 LF to provide adequate space for each group to dock table near sink per FFE Standards ~ 20 LF No
Casework at Prep Areas	Base cabinets 24" deep, no doors, 1" lip Upper cabinets 12" deep, no doors, 1" lip Open shelving 24" deep, 1" lip; accommodates science kits for 2 labs. Largest of totes is 24" l x 17" w x 14" h.	~ 6 LF ~ 6 LF ~ 50 LF of shelf
Countertops at Labs & Prep Areas	Chemically resistant plastic laminate countertops No epoxy countertops at middle schools	All locations
Plumbing	Number of sinks at labs Number of sinks at prep area Acid resistant piping not required Gas piping not required Emergency eyewash at labs and prep areas Emergency shower at labs and prep areas Dishwasher in all prep areas	8 preferred (1 needs to be ADA) 1 - - At one sink at each lab & in prep area Required at prep area if/where future fume hood is roughed in Yes
Special Equipment & Ventilation	Fume hood in lab or prep area Shaft & duct for future fume hood* Flammable storage and chemical storage cabinets, each with venting	Not required Provide at one prep room Provide at the same prep room as future fume hood
Electrical	Power located directly adjacent each lab station for laptop use on countertop Overhead cord reels (4 per lab) with support grid Electrical circuitry for hotplates Floor outlet for mobile demonstration station Goggle sanitizers and storage	All labs All labs Not required Not required Only if required by code
Appliances & Equipment	Refrigerator with freezer, no icemaker D-rings for securing balances Autoclave at prep area Distiller at prep area	In one prep area, other than the one with special venting Not required Not required Not required
Furniture	See SPS Furniture Standards for Middle Schools, as updated after October 2020	

*Middle Schools with Highly Capable Programs have taught some high school programs in the middle schools, so it was suggested that rough-in for a fume hood be provided in an upper floor prep area. For that reason, the Space Features provide one prep area with a flammable storage and chemical storage cabinets and allow for future installation of a fume hood. As of 2021, Highly Capable programs will be phased out, so design teams should inquire of the Science Program Manager during the Site-Specific Ed Spec process if the fume hood rough-in, flammable storage & chemical storage cabinets, and an associated emergency shower should be provided.

[12] Ibid.

Central Science Kit Storage*:

- A storage closet that can accommodate and stage the entire school's supply of science kits.
- Quantity of kits is estimated to be 6 lab classes x 15 totes per lab = 90.
- Largest size of totes is 24" l x 17" w x 14" high.
- Kits will be distributed to the science labs as each content unit is initiated, and returned to the Central Science Kit Storage area as units are completed.
- In addition to storage shelving, allow space for two 30" x 60" project tables to sort/stage kits for distribution and re-stocking.

* Preferred, but optional - Design teams should ask the district during the Site-Specific Ed Spec process

Adjacency Descriptions

Science Labs

- In order to support grade level groupings as well as the ability to integrate science with other disciplines, science labs should not all be grouped together in one location. They should be located within or adjacent to academic neighborhoods, i.e. distributed in different wings and/or on different floors, in groupings with General and Special Education classrooms.
- Science labs should generally be grouped in pairs adjacent to a shared prep area.
- At least one pair of science labs should have direct access to an outdoor learning area of sufficient size that an entire class can work outside. The outdoor learning area should be located to have sun exposure at least four hours of the day.
- Science labs should be located in reasonable proximity to small group collaboration rooms and the Learning Commons.

Science Prep & Storage Areas

- While prep areas should be directly adjacent to the science labs that they serve, a direct door between labs and prep areas is not necessary. The priority for prep areas is to have a door to the hallway. It is preferable to have greater wall space in the prep area rather than doors with a direct connection to each lab, however, if teachers prefer the direct access then that can be provided in addition to the hallway door.

Central Science Kit Storage:

- Near the school's Receiving Area with reasonable access to Science Labs.

Adjacency Diagram

Science classrooms & support spaces are distributed throughout the General Academic Neighborhoods.

Please refer to “What Do We Do: General Education” section for combined Adjacency Diagram.

Special Education

Every Student is a general education student.[1]

Currently, approximately 13% of Seattle Public School students receive special education services.[2] But, 100% of students are general education students. In Seattle Public Schools, special education is a service, not a place. At any given time from age 3 to 21, a student can qualify for special education services.

Every Student in Seattle Public Schools deserves membership, challenge, support, and achievement.

The Special Education department's goal is to work collaboratively with school and district leaders, teachers, students, and families to provide the tools, guidance, supports and services needed to ensure access and success for students with disabilities.

Special Education Core Values[3]

- To improve outcomes for students with disabilities
- To work proactively to provide a continuum of services for students with disabilities including increasing student capacity for independence, self-advocacy, inclusion and access to the core curriculum
- To collaborate with district and building teams to support effective, evidence-based service delivery for students with disabilities
- To provide relevant, meaningful professional development and coaching to support effective service delivery for students with disabilities
- To educate district and community partners regarding the rights and needs of students with disabilities

Approach to Special Education[4]

Special education services are the support, settings, and instruction provided to an individual student, supplementing general education curriculums and settings. The scope and design of each student's services are driven by their evaluation, which is used to determine if a student is eligible for services and what services they may need.

Individual Education Plan (IEP) and IEP Team

Every special education student has their own Individual Education Plan (IEP) with content that is uniquely tailored to their areas of qualification, present levels of performance, supplemental aids, accommodations and related services. The IEP is created by a team that at a minimum consists of a parent or guardian, a general education teacher, a special education teacher (Case Manager) and an administrative designee. The Case Manager, who is based on the student's placement, coordinates the Service Delivery Team, facilitating the IEP Team meetings, the IEP and the delivery of services. The Service Delivery Team may include additional general or special education teachers, related service providers and instructional assistants in addition to the IEP Team. The student is the focus and teamwork is at the heart of the work, where every participant's voice matters.

Least Restrictive Environment (LRE)

Every student should learn in their Least Restrictive Environment (LRE), meaning that students with disabilities should be educated with students without disabilities to the maximum extent that they are allowed by their disability and learning needs. A student's LRE will vary across instructional content and settings throughout the school day. *Assignment*, or the specific school a student attends, is a District decision and will be aligned with the Board Adopted Student Assignment Plan that places students at

[1] Seattle Public Schools' presentation "A New Continuum of Services for Special Education Students" dated January 2016. Much content in this section is derived from the referenced presentation and Seattle Public Schools website.
[2] SPS P223 Enrollment Report, October 1, 2020, Special Education Served as a percentage of K-12 Total FTE.
[3] Special Education Board Oversight Work Session Presentation, March 20, 2019.
[4] Content in this section is derived from SPS Special Education website, accessed November 2020.

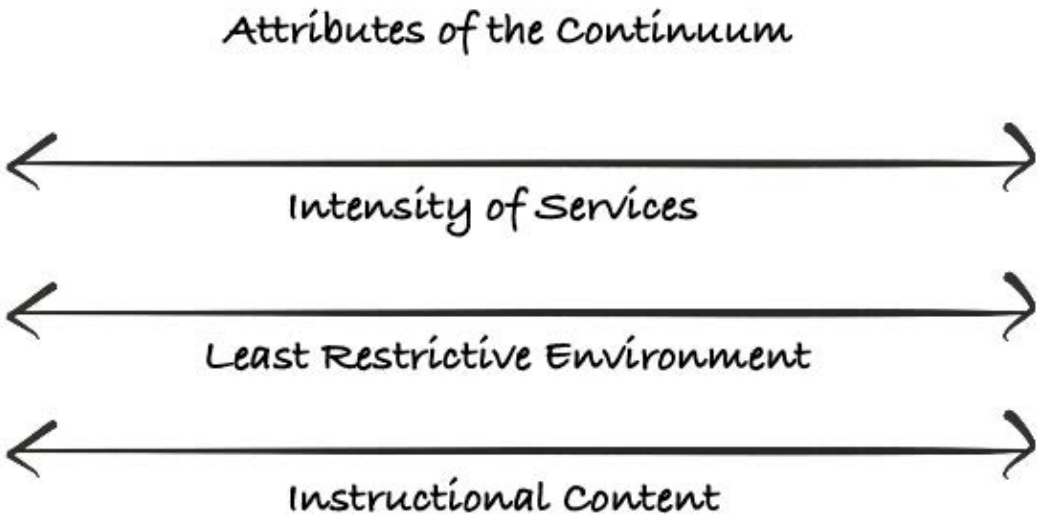
their neighborhood schools.

A Continuum of Services

The concept of a *continuum of alternative placements applies* to special education in all school districts in the state of Washington. The Continuum Approach is how services are delivered within Seattle Public Schools.

Placement

Placement is a specific term used in the Individuals with Disabilities Education Act (IDEA), so it means the same thing across the United States, within a special education context. Placement defines the intensity, setting, and instructional content of each student's services, and is an IEP team decision.



Intensity

Intensity describes how complex a student's services are. It is documented in the IEP with quantitative and qualitative measures.

Quantitative measures describe information that can be measured with numbers. This can include:

- how many areas of special education instruction and related services
- how many minutes of instruction and related services
- how many accommodations, etc.

Qualitative measures describe information about qualities and are captured in narrative sections of the IEP, including:

- present levels of academic achievement
- functional performance, etc.

Setting

Setting describes the location where a student receives instruction. Every student should learn in their least restrictive environment (LRE). The general education setting is the default LRE. However, some students have specific learning needs that make an alternative setting their LRE. A student's LRE can vary throughout their school day, across instructional content and settings.

In a student's IEP, their setting is often summarized as the percentage of time spent in the general education setting.

Instructional content

Instructional content is the scope of what is being taught beyond the general education curriculum. Under IDEA it is called Specially Designed Instruction.

Pathways and Primary Service Types[5]

A *Primary Service type* categorizes a student's placement for the purpose of assignment within Seattle Public Schools. (This is sometimes called an SPS Primary Service pathway.) Each student's IEP team selects the Primary Service pathway that best aligns with the student's IEP. A student's primary service pathway may change through the IEP process due to significant progress, or lack of progress.

Five Primary Pathways

The District currently has defined Five Primary Pathways across the Special Education Services Continuum. They do not "define" the student but instead "define" the personnel coordinating that student's IEP. The current Five Primary Pathways are Resource, Access, Moderate Intensive, Social/Emotional and Intensive Services. Descriptions of the current Five Primary Pathways are:

1. **Resource** – Provides specially designed instruction to students:
   A. With mild to moderate intensity in their special education instructional needs
   B. Who benefit from spending most of their instructional time in general education settings with targeted support; other instructional time is spent in a smaller group setting (Resource Classroom)
   C. Instructional content varies, based on each student's IEP
2. **Access** – Provides specially designed instruction to students:
   A. With moderate to intensive academic and functional special education needs
   B. Who are able to make progress on their IEP goals while spending most of their instructional time, including specially designed instruction, in general education settings with a range of supports; other instructional time is spent in a smaller group setting (Access Classroom)
   C. Instructional content varies, based on each student's IEP
3. **Moderate Intensive Services (similar to Focus at K-5)** – Provides specially designed instruction to students:
   A. With intensive academic and functional special education needs
   B. Who benefit from spending most of their instructional time, including specially designed instruction, in a smaller group setting (Focus Self-Contained Classroom) as their Least Restrictive Environment (LRE)
   C. Instructional content varies, based on each student's IEP, and provides students opportunities to participate in general education curriculum through specially designed instruction at their present level of performance.
4. **Social/Emotional** – Provides specially designed instruction to students:
   A. With more intensive academic and functional special education needs
   B. Who benefit from spending most of their instructional time, including specially designed instruction, in a smaller group setting (Social/Emotional Self-Contained Classroom) as their Least Restrictive Environment (LRE)
   C. Instructional content varies, based on each student's IEP, and supports development of the student's social/emotional skills, function and understanding.
5. **Intensive Services**– Provides specially designed instruction to students:
   A. With intensive academic and functional special education needs
   B. Who benefit from spending most of their instructional time in a smaller group setting (Intensive Services Self-Contained Classroom) as their Least Restrictive Environment (LRE)
   C. Instructional content varies, based on each student's IEP, but includes a curriculum that significantly differs from the general education curriculum and may include academic, communication, life and functional skill components

As part of the Service Continuum's flexible approach, individual student services may span more than one placement description during their school day or overall weekly schedule. A student's services, placement and Case Manager can change over time through re-evaluation and IEP Team determination. **The District's goal is for all Assignment Middle Schools to offer the full**

[5] SPS website > Departments > Special Education > Services and Accommodations > Placement and Primary Services Pathways, accessed November 2020.

Continuum, consistent in quality and availability across the District.

Even though the service model supports the ability for special education students to be in the general education environment whenever possible, students in Intensive and Moderate Intensive placements may spend more than half of their day within these classrooms. Therefore, increased participation of special education students in general education classrooms does not reduce the size or quantity needed for the above-noted SpEd classrooms.

Unique Placements

A small percentage of students will have a unique placement and assignment if their needs fall outside of the current Five Primary Placements. Descriptions of four current unique placements are:

1. **Deaf and Hard of Hearing** – Provides specially designed instruction to students:
   A. Who are deaf and hard of hearing
   B. Who benefit from spending some to all of their instructional time, including specially designed instruction, in a smaller group setting as their least restrictive environment (LRE)
   C. Instructional content provides students opportunities to participate in general education curriculum through specially designed instruction with accommodations, modifications and interpreter services
   D. Locations where services are provided: TOPS K-8 and Roosevelt High School.
   E. As of 2020, Washington MS is the Sensory Disability Hub for itinerant staff serving unique placement programs. Shared offices for itinerant staff to use as a home base will need to be provided for the following numbers of itinerant staff when the Hub is relocated to accommodate the growth of the TAF program.
      - 15 Vision staff
      - 3 Deaf and Hard of Hearing staff
      - 7-8 Assistive Technology staff

2. **Blind and Visually Impaired (Vision Services)** – Provides specially designed instruction to students:
   A. Who are blind and visually impaired
   B. Who benefit from spending some to all of their instructional time, including specially designed instruction, in a smaller group setting as their least restrictive environment (LRE)
   C. Instructional content provides students opportunities to participate in general education curriculum through specially designed instruction with accommodations and modifications
   D. Locations – Vision services are provided on an itinerant basis, so no additional space requirements are associated with this placement.

3. **Medically Fragile** – Provides specially designed instruction to students:
   A. Who need intensive support for medical care needs throughout the day
   B. Who benefit from spending most of their instructional time, including specially designed instruction, in a smaller group setting (Medically Fragile Classroom) as their least restrictive environment (LRE)
   C. Instructional content provides students opportunities to participate in general education curriculum through specially designed instruction at their present level of performance
   D. Locations – Since there are very few medically fragile students, they may be assigned to a different site with appropriate services.
      - Current locations serving middle schools include McClure MS and Orca K-8 but no programs are currently anticipated for Mercer, Aki Kurose, or Washington Middle Schools.

4. **18-21 Transition Services** – Provides specially designed instruction to students:
   A. 18-21 years of age with intensive functional special education needs
   B. Who benefit from spending most of their instructional time in a smaller group setting as their least restrictive environment (LRE), with a majority of their time spent in the community which is considered a general education setting
   C. Instructional content includes a curriculum that significantly differs from the general education curriculum and may include functional academic, communication, life and other functional skill components
   D. Services not applicable to middle schools.

Support Services

As needed per their Individual Education Plans (IEPs), special education students also work with the school-based therapists and specialists noted below, either within their primary learning environment or "pulled in" to the specialist's office or therapy room. These therapists and specialists include:

1. **Occupational and Physical Therapists (OT/PT)** – Occupational therapists at schools help students participate in the things they want and need to do through the therapeutic use of everyday activities (occupations). Common occupational therapy interventions include helping children with disabilities to participate fully in school and social situations.[6] A school-based physical therapist promotes motor development and the student's participation in everyday routines and activities that are part of the educational program.[7] In the District, an occupational or physical therapist is typically working with one student at a time in the OT/PT Room or inside the student's classroom. They are moving away from using large equipment and "pushing out" a lot more services into the general education environment rather than "pulling in" students into OT/PT Room.
2. **Speech-Language Pathologist (SLP)** – SLPs work with students who have a variety of disabilities including language, voice, fluency or stuttering, articulation, and swallowing (also called dysphagia).[8] In the District, SLP's typically work with one or two students at a time at separate table inside their office.
3. **School Psychologists** – Every school has access to the services of a school psychologist. Within the District, their primary role is to aid in the identification and evaluation of students with suspected disabilities by conducting individual psychological and academic assessments, determining a student's eligibility and need for special education services. Their activities are typically conducted on a one-to-one basis, one student at a time. In addition, they also:
   A. Provide direct support and interventions to students
   B. Consult with teachers, families, and other school-employed mental health professionals (i.e., school counselors, school social workers) to improve support strategies
   C. Work with school administrators to improve school-wide practices and policies
   D. Collaborate with community providers to coordinate needed services

Activity zones to be accommodated within the above classrooms and support service spaces are as indicated in the SPS Furniture Fixture & Equipment Standard Space Types diagrams. Design teams shall configure spaces so as to readily accommodate the layouts shown in those diagrams (i.e., no disproportional spaces that preclude those layouts).

[6] From the American Occupational Therapy Association website www.aota.org "About Occupational Therapy".
[7] From the American Physical Therapy Association website www.apta.org PDF "Physical Therapy in School Settings".
[8] From the American Speech-Language-Hearing Association website www.asha.org presentation "The Role of the SLP in Schools".

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Classroom – Resource Services	1 T (no IA for secondary)	Up to 22	1	1	450	450
Classroom – Access Services	1 T+3 IA	Up to 13	1	1	450	450
Classroom - Social Emotional Learning (SEL)	1 T+2 IA	Up to 10	1	1	900	900
Classroom – Moderate Intensive Services (full size)	1 T (No IA)	Up to 10	1	1	900	900
Classroom – Intensive Services	1 T+2 IA	Up to 7	1	1	1000	1,000
Teaching Kitchen**	1 T	Up to 6	-	Zone	**	**
Shared Toilet Room with Changing Table - adjacent to Intensive Services & Moderate Intensive Services Classrooms	1	1	-	1	150	150
OT & PT Room with Integrated Storage	1	1	-	1	600	600
SLP, Psychologist Office	1	2	-	2	120	240
Required Subtotal			**9**			**4,690**

T.S. = Teaching Station
Staff: T = Teacher and IA = Instructional Assistant
* Number of resource teaching stations depending on number of resource services delivered at each school.
**Utilize community kitchenette adjacent to Student Commons/Dining

Spatial Descriptions

Five Primary Pathways

Resource & Access Classrooms

- Teaching wall
- Lower and upper casework including wardrobe.
- Sink
- Shelving
- A de-escalation niche at least 4' long x 2' deep should be included in every classroom; see "What Students Tell Us."

Social/Emotional Classroom

- Room layout needs to accommodate a "de-escalation zone" in one corner, which is typically created using furniture, but if the classroom provides an alcove or niche that would be ideal. This zone must be always available, so it cannot be

outside the classroom.
- Teaching wall
- Lower and upper casework including wardrobe.
- Sink
- Shelving
- Cubbies
- A de-escalation niche at least 4' long x 2' deep should be included in every classroom; see "What Students Tell Us."

Moderate Intensive Classrooms

- Acceptable to group Intensive Services and Moderate Intensive Services classrooms together, if other SpEd classroom spaces are distributed throughout the school.
- A de-escalation niche at least 4' long x 2' deep should be included in every classroom; see "What Students Tell Us."

Intensive Services Classrooms

- Room layout needs to accommodate a "de-escalation zone" in one corner, which is typically created using furniture, but if the classroom provides an alcove or niche that would be ideal. This zone must be always available, so it cannot be outside the classroom.
- Teaching wall
- Lower and upper casework including wardrobe.
- Sink
- Shelving
- Cubbies
- A de-escalation niche at least 4' long x 2' deep should be included in every classroom; see "What Students Tell Us."

NOTE: the School Board is sensitive to the labeling of Special Education classrooms. While it is acceptable to label them with specific program assignments throughout the design of the project in order to track that the quantities and locations are as required, signage for each of the completed classrooms shall simply be labeled as "CLASSROOM" like all of the other classrooms in the building.

Support Services

OT/PT with Integrated Equipment Storage Room

- Built-in equipment hooks for misc. equipment.

Speech-Language Pathologist Office

- For a 1,000-student middle school – (1) Part-time staff

Psychologist Office:

- For a 1,000-student middle school – (1) Full-time staff

Accessory Spaces

Toilet Rooms with Changing Table

- One with direct adjacency to Intensive Services Classrooms, with space for a changing table.
- One with direct adjacency to Moderate Intensive Services Classrooms, with space for a changing table.

Teaching Kitchen

- Used by Intensive Services and Moderate Intensive placement students for life skills.
- Preferable the kitchenette is not within any of the above classrooms due to safety concerns.

Adjacency Descriptions

General - Location

- Special education facilities should be integrated throughout the school to support the concept of inclusion and because students receiving special education services need access to the general education environment.
  - Do not locate in separate buildings or anywhere they would be separate or unequal.
  - Each special education classroom supports students at multiple age/grade levels; therefore, provide locations that do not contribute to student stigmatization, either by proximity to a grade level wing/cluster or by grouping all special education classrooms together
    - Example: An eighth-grade student in a special education classroom should not feel like he/she is in a sixth grade area or in a special education wing
- Special attention should be given to accessibility; consider which program spaces should be located on the ground or main floor or near bus or parent pick-up and drop-off
- Pairing of special education classrooms can help aid flexibility of use.
- Plan for sharing of resources, such as the psychologist's office, with the entire school. Provide access to these flexible/shared office spaces from main hallways.

Five Primary Pathways

Resource & Access Classrooms

- Disperse throughout the building

Social/Emotional Classroom

- There is a benefit to placement near at least one Administrator's office for additional support
- However, needs to be away from school entrances/exits because students can be 'runners'
- "De-escalation zone" cannot be outside the classroom.

Moderate Intensive Services Classrooms

- Preferable to pair Moderate Intensive classrooms with each other
- Acceptable to group Intensive Services and Moderate Intensive classrooms together, as long as other SpEd classroom spaces are distributed throughout the school

Intensive Services Classrooms

- Preferable to pair Intensive Services classrooms with each other
- Acceptable to group Intensive Services and Moderate Intensive classrooms together, as long as other SpEd classroom spaces are distributed throughout the school
- Locate near Health Services suite for ready access to shower/washer/dryer
- Near buses/parent drop-off & pick-up and elevator (ADA access), as well as near elective classes like Art and PE for easy access to programs not taught within their classroom (less likely to go to Science classrooms)
- Consider proximity to Teaching Kitchen for Life Skills instruction
- "De-escalation zone" cannot be outside the classroom.

Support Services

OT/PT with Integrated Equipment Storage Room:

- Benefit to be near Intensive Services and/or Moderate Intensive classrooms because they "push out" to them more
- Location on the main floor is preferred for ease of access

Speech-Language Pathologist Office

- Can be anywhere in building; may be located near Intensive Services or Moderate Intensive classrooms for nearby access to services

- May be near Psychologist Office or other offices so space can be used by other staff

Psychologist Office

- Can be anywhere in building; may be located near Intensive Services or Moderate Intensive classrooms for nearby access to services
- May be near Speech-Language Pathologist Office or other itinerant offices for use of those spaces by the part-time psychologist

Accessory Spaces:

Toilet Rooms with Changing Table

- One with direct adjacency to Intensive Services Classrooms, with space for a changing table.
- One with direct adjacency to Moderate Intensive Classrooms, with space for a changing table.

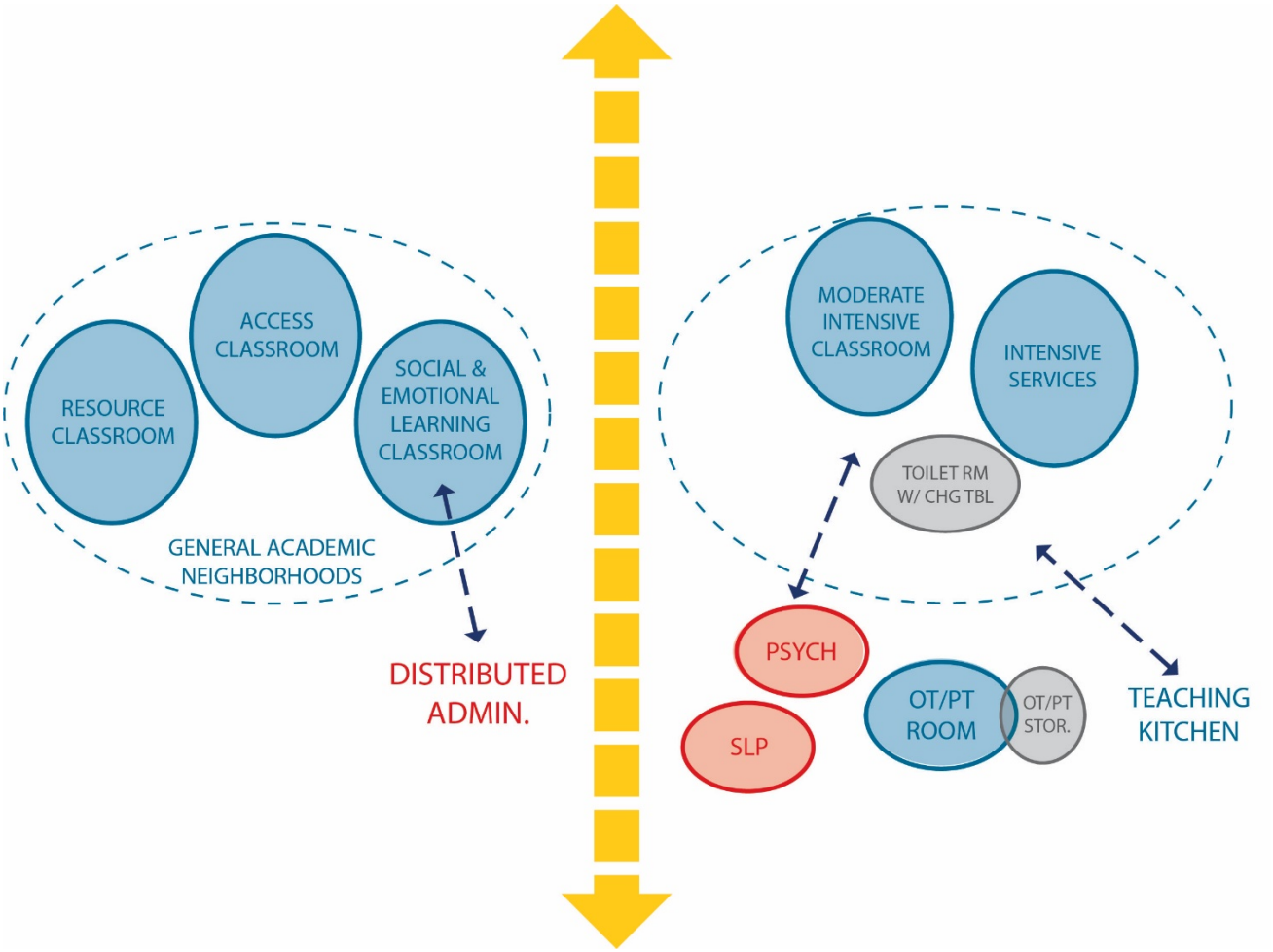
Shower/Washer/Dryer

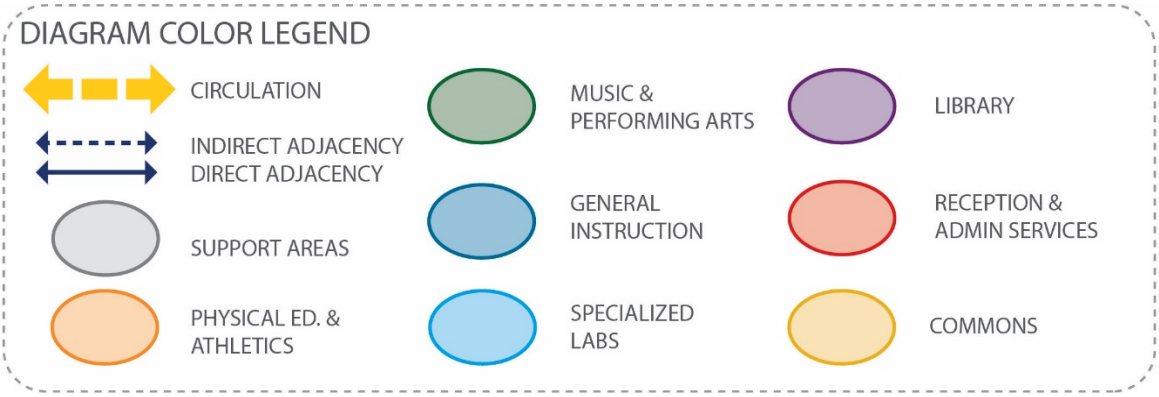
- Dedicated shower/washer/dryer for SpEd not required. Can share use of shower, washer and dryer within the Health Services suite and shall be configured so it can be readily accessed by SpEd without need for supervision by Nurse.. Configure so that access is provided off hallway within Health Services suite rather than from Treatment Room or Cot.

Teaching Kitchen

- Consider proximity to Intensive Services and Moderate Intensive classrooms
- Preferable the kitchenette is not within any of the above classrooms due to safety concerns.
- Configure the community kitchenette adjacent to the Student Dining/Commons to support teaching of Life Skills as well as community use.

Adjacency Diagram





Career and Technical Education

Our Mission is to broaden career choices for students, to support and promote high quality instruction, and ensure that every secondary school has a range of Career and Technical Education offerings for every student.[1]

Career and Technical Education (CTE) is a planned program of courses and learning experiences that begins with exploration of career options, supports academic and life skills, and enables achievement of high academic standards, leadership, and preparation for career and college. The program and its courses are included as part of the academic curriculum of the district.

The district establishes local Career and Technical Advisory Committees to assist in the design and delivery of the district's Career and Technical Education program. Committees advise the district on current labor market needs and the programs necessary to meet those needs. The district's Career and Technical Education program is related to employment demands, current and future, and to the needs and interests of students.

The Board annually reviews and approves the district's plan for the design and delivery of its career and technical education program. Equitable access to all programs in middle schools, high schools, and the Seattle Skills Center will be reviewed. The plan will ensure academic rigor, establish program performance targets, address the skill gaps of Washington's economy and provide opportunities for dual credit.

Career and Technical Education Program Standards[2]

The Career and Technical Education (CTE) Program Standards are designed to empower students to live, learn and work as productive citizens in a global society. Career and Technical Education programs must meet standards established by the Office of Superintendent of Public Instruction. These CTE standards are designed to ensure high quality, consistent, and relevant CTE programs as essential components of educational and career pathways. These standards provide OSPI approval guidelines for CTE courses and guide the development and continuous improvement of CTE programs in local school districts.

Washington Career and Technical Education Foundations

1. Students will demonstrate occupationally specific skills and competencies including the application of current state and national core content standards using a contextual approach.
2. CTE programs are an integral part of the K-20 education system and are coordinated with other workforce development programs.
3. Students that participate in CTE programs develop and apply skills and knowledge needed to live, learn, and work in an increasingly diverse society. These skills include an appreciation for all aspects of diversity, respectful interaction with diverse cultures, and recognition and elimination of harassment, bias, and stereotyping.
4. Leadership skills are integrated throughout the content of each course. Students are encouraged to participate in career and technical student leadership organizations related to the program.
5. Employability skills are integrated throughout the content of each course, and students in CTE programs apply these skills in each program.
6. CTE programs of study assist students with career planning, career development, and/or transition to employment and post-secondary options.
7. CTE instructional equipment, facilities and environment are comparable to those used in the workplace.

[1] This section adapted from Seattle Public Schools website: Career and Technical Education and Board policy 2170.
[2] Excerpted and adapted from "Career and Technical Education Program Standards", published on the OSPI website November 2020.

8. The instructor holds a valid Career and Technical Education teaching certificate for the content area in which he or she is assigned.
9. CTE programs are provided resources to connect student learning with work, home, and community.
10. CTE programs are structured so that supervision, safety, and the number of training stations determine the maximum number of students per classroom.
11. Program specific advisory committees guide the relevance and continuous improvement of the program. Advisory committees must include balanced representation from business/industry and labor reflecting the diversity of the community.
12. CTE programs are reviewed annually, and the results are used for continuous program improvement.

Exploratory and Preparatory Courses

The Career and Technical Education Standards document is organized into two areas: Exploratory and Preparatory. All courses within middle school are Exploratory, as further described below, and begin the development of the Leadership skills also described below.

Career and Technical Education Program Standards – Exploratory

Exploratory courses will meet the following regulations:

1. Demonstrate application of the state and national core content standards in the context of preparing for living, learning and working.
2. Demonstrate foundational and career cluster specific skills required to meet current industry or nationally defined standards.
3. Demonstrate knowledge of career options within the related career clusters.
4. Demonstrate leadership skills and employability skills.

Career and Technical Education Program Standards – Preparatory

Preparatory courses expand upon exploratory course characteristics in specific ways that build industry competencies. These are a part of the high school curriculum so will not be further discussed here.

Core Leadership Skills

The leadership skills summarized in the three categories below are examples of core leadership skills that students should demonstrate prior to their completion of a CTE program.

Leadership: Individual Skills

The student will:

1. Analyze and apply decision-making skills.
2. Demonstrate oral, interpersonal, written, and electronic communication and presentation skills.
3. Engage in activities that require applying theory, problem-solving, and using critical and creative thinking skills.
4. Demonstrate self-advocacy skills by achieving planned, individual goals.
5. Conduct self in a professional manner.

Leadership: Group Skills

The student will:

1. Participate effectively in small groups and large groups to reach common goals, utilizing the principles of group dynamics in a variety of settings.

2. Demonstrate knowledge of conflict resolution and challenge management.
3. Demonstrate the ability to both lead and follow.
4. Demonstrate a working knowledge of parliamentary procedure.

Leadership: Community and Career Skills

The student will:

1. Analyze the roles and responsibilities of citizenship.
2. Demonstrate social responsibility in family, community, and business and industry.
3. Participate in community service and service-learning activities.
4. Utilize organizational systems to advocate for issues on the local, state, and national level.
5. Participate in the development of a strategic plan and work to implement an organization's goals.

Middle School Courses

CTE courses in SPS middle schools have encompassed a range of options over the past ten years or so, including various introductory technology courses such as Gateways to Technology, Technology Exploration, Computer Science Technology, as well as STEM Modeling, Video Production, Graphic Design, and others. While some schools may still offer Technology Exploration, STEM Modeling, or Computer Science, generally the CTE program is evolving toward offering survey courses that will provide students with an overview of the options in high school courses.

To expose students at the middle school and to inform and create engagement in career focused high school programs, the CTE Innovation Lab was developed and field tested. The CTE Innovation Lab for 7th grade allows students to use design thinking and problem-based learning on projects that explore many career pathways.[3]

The 7th grade course entitled STEM Innovation Lab A encompasses units (and activities) that include[4]:

- Introduction/Makerspace Safety
- Coding
- Computer Hardware & Software
- Digital Photography/Video
- Introduction to Circuits
- Basic Electronics
- eTextiles and Wearables
- 3D Design & Printing
- Final Project

A second semester course entitled STEM Innovation Lab B will also be offered, including units such as:

- STEM Career Readiness
- Video Game Design and Microcontrollers
- Programming using sensor inputs and controlling LED's, motors, and other outputs.
- Video documentation
- Problem solving using computers and logic.

[3] Seattle Public Schools Career and Technical Education Annual Plan, June 2020, p. 7.
[4] SPS CTE Draft Framework for STEM Innovation Lab A & B, 2019.

Activities and Descriptions for Instructional Spaces

Middle school enrollment in CTE has ranged over the last five years from a low of 156 FTE in 2019-20 to a high of 213 FTE in 2016-17.[5] One of the challenges for CTE programming at the middle schools is having enough students and staff to support a full-time CTE program, as there is limited time within a student's schedule for elective courses. **Given this challenge, the number of sections of CTE courses that can be offered in a middle school was reviewed and it was determined that two dedicated classrooms are sufficient to accommodate CTE offerings**.[6]

During the workshops for the High School Ed Specs, much of the discussion with administrators and program managers centered upon the historical tendency for CTE spaces to be built to serve dedicated programs with customized features.[7] When there are changes in staffing or in program emphases, those spaces are expensive to retrofit and therefore fall into disuse. It was agreed that a better model for development of CTE spaces is to provide "Universal" Labs with adjacent storage areas that can serve a variety of programs over time. This model fits the variety of activities offered within each middle school course as well.

Universal Lab, including Storage.

A classroom/lab environment where students can:

- learn principles and practices of computer science, programming, and game design.
- learn to use introductory technologies such as basic electronics, circuits, and microcontrollers.
- utilize robust computer workstations with large monitors, plus peripherals such as printers.
- learn visual communications skills through the practice of conveying ideas through digital photography and video.
- learn the technical skills to create their own work.
- evaluate their work through individual and group critiques.
- prepare a portfolio of their work.

[5] Seattle Public Schools Career and Technical Education Annual Plan, June 2020, p. 7.
[6] Middle School Ed Spec Meeting with Capital Planning & Career & Technical Education Dept, November 24, 2020.
[7] High School Ed Spec Visioning Workshop #3, February 1, 2016.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Universal Lab	1	Up to 32	2	2	1,350	2,700
Prep/Storage Space	-	-	-	2	150	300
Required Subtotal			**2**			3,000

T.S. = Teaching Station

Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities.

Spatial Descriptions

For flexibility in how the middle school might be organized, it was agreed these universal labs should be the same size as the science labs. Their configuration and amenities are different. For example, the labs will require only one or two sinks instead of the number required for science labs.

It is also preferred the storage of materials, supplies, or peripheral equipment is in a separate but directly adjacent lockable storage room rather than built into the universal lab with shelving or casework.

Space Features Category	Space Features	Middle School Lab
Casework at Labs	Perimeter base casework at 34" h, sized to accommodate up to 60 student projects in lockable cubbies, each sized ~15" x 15" x 24" deep Upper cabinets, doors not necessary Fixed demonstration table	~ 40 LF ~ 20 LF No
Casework at Storage Area	Base cabinet Upper cabinet Open shelving w/ 1" lip, 24" deep	~ 6 LF ~ 6 LF ~ 50 LF
Countertops	Chem resistant plastic laminate countertops @ labs & adjacent prep areas Epoxy countertops @ labs & adjacent prep areas	Yes No
Plumbing	Number of sinks Emergency eyewash at one sink	2 Yes
Special Equipment & Ventilation	For 3-D printers (assume 3 each)	Provide ventilation per code.
Electrical	Cord reels (4 per lab) and support grid Floor outlet for mobile demonstration station	4 per lab, with grid No
Special Considerations	Green screen	
Appliances & Equipment	None required	
Furniture	See SPS Furniture Standards, as updated after October 2020	Yes

Site-Specific Ed Spec

Some middle schools combine a CTE offering such as STEM modeling with science and teach both disciplines within a science lab. In that instance, it is envisioned that one of the universal labs assigned to CTE courses would be adapted to become a science lab with the full complement of lab stations and sinks, while the other would remain a universal lab appropriate to computer science or technology exploration.

Adjacency Descriptions

Universal Labs

- Ground floor location is preferred for at least one lab, to provide ease of access for bringing materials and supplies into the labs. Adjacency to an outdoor courtyard would be ideal, to allow students to work on projects outdoors when the weather allows.
- The second lab is likely to be utilized for Information Technology/Computer Science, so determine site specific preference for adjacency near other Universal Lab, Science, or Art.

Visual and Performing Arts

Seattle K-12 Arts Plan Goals[1]

As described in "What Do We Know: Elevating and Integrating the Arts", the Seattle K-12 Arts Plan identifies the goal for every middle school student as:

Every SPS middle school student receives:

- A minimum of two semesters of visual, performing, or media arts classes.
- Integrated arts instruction in a sixth-grade language arts, science, or social studies class.
- Arts options that are diverse and relevant, and lead to sequential learning opportunities in high school.

Seattle K-12 Arts Plan Strategies

The Seattle K-12 Arts Plan identifies strategies for increased arts education in Seattle Public Schools. For the purposes of this document, strategies & tactics that are relevant to Middle School facilities planning have been excerpted. These include:

Strategy 2: Provide culturally relevant K-12 arts curricula and instruction that emphasizes development and assessment of 21st century skills.

21st century skills continue to be developed in core arts courses, through school-community arts partnerships, in courses that integrate arts with other disciplines, and in Career and Technical Education courses.

The Visual and Performing Arts department has drafted a framework called "The Roots: A Culturally Responsive & Antiracist Arts Framework" with a vision to provide all students arts learning experiences that are culturally responsive, relevant, and anti-racist.[2]

- **Tactic A: Enhance Arts Curricula and Student Assessments to Include 21st Century Skills and Enduring Understandings[3]**

  While for many, 21st century skills such as creativity and imagination might seem synonymous with arts learning, they would not have gotten that impression from reading the National or Washington State Arts Standards. Until recently, arts standards have heavily emphasized the development of discrete techniques and skills in specific arts forms, not the higher-order thinking skills or processes involved in creative expression. The historical approach to arts education in the United States, as reflected in the National Arts Standards, is one based on the conservatory tradition of arts education—a system of education designed to produce a creative elite of technically advanced artists who will become the producers of art for the economic elite, performing in the symphony hall or hanging work in galleries. As such, school-based arts education has not been well designed as central to the education of all students.

  Through an emphasis on teaching the 21st century skills developed through creative practice, SPS will recognize the benefits of arts education for all young people. All SPS arts curricula and assessments will be redesigned to explicitly include 21st century skill development framed by enduring understandings.

[1] Excerpted from Seattle K-12 Arts Plan, a collaborative effort of the Seattle Office of Arts & Cultural Affairs and Seattle Public Schools, p. 12-13. Much content in this section is excerpted or adapted from this Plan.
[2] The Roots: A Culturally Responsive & Antiracist Arts Framework, The Antiracist Arts Education Task Force, Visual & Performing Arts Program, Seattle Public Schools, 2020.
[3] Seattle K-12 Arts Plan, a collaborative effort of the Seattle Office of Arts & Cultural Affairs and Seattle Public Schools, pp. 48-9.

- **Tactic D: Connect arts and careers for secondary students through Media Arts Centers focused on 21st century skill development.**[4]

  While the focus of creating Media Arts Skills Centers is on high school students interested in pursuing arts-related careers in industries such as Music Production, Theater Technology, Video Production, and Graphic Design, students are entering those programs without the necessary foundational arts skills.

  The Visual and Performing Arts Department will coordinate with the Career and Technical Education Department to provide foundational arts courses at comprehensive high schools, and later, at middle schools.

  - For the foreseeable future, a typical classroom can be utilized for the development of these foundational skills within middle schools; see Future Digital Arts classroom for description.[5]

- **Tactic F: Include Dance in Every Physical Education Course**[6]

  While the Seattle K-12 Arts Plan focuses on music and visual arts instruction, we know from student and community focus groups that opportunities to learn through dance are important to our community. Dance education would likely start at high schools, and at some point, be provided at the middle schools.

  - No accommodations for dance are needed at the Multipurpose/Fitness Room, and any future affordances for dance such as mirrors or mobile dance barres would likely be made at the stage.[7]

- **Tactic G: Build a Theater Program in Every High School**[8]

  In surveys and focus groups, both students and community members said that theater should be available to all SPS students, especially at the secondary level.

  - Elementary schools have the option to integrate theater into their curriculum, and at the high school level, all but three of the comprehensive high schools have a theater program. So there is potential interest in developing a theater program at middle schools.
  - Only Hamilton and Jane Addams Middle Schools currently offer theater programs, but to support this long-term intent, the Arts Department recommends that each middle school stage be designed for this potential.

Activities for Instructional Spaces for Visual Arts

Visual Arts Classroom/Lab

A lab/studio environment where students can:

- learn about two-dimensional and three-dimensional artwork through lectures, viewing slides and presentations, reading and writing.
- learn visual communications skills through the practice of conveying ideas through 2-D & 3-D media
- learn the technical skills to create their own work through the practice of drawing, painting, printmaking, and similar 2-D arts, as well as the practice of tilemaking, pottery, sculpture, and similar 3-D arts.
- evaluate their work through individual and group critiques.
- prepare a portfolio of their work.

Future Digital Arts Classroom/Lab

An environment where students can:

- learn about digital graphics and artwork through lectures, viewing slides and presentations, reading and writing.
- learn visual communications skills through the practice of conveying ideas through digital graphics and media.

[4] Ibid, p. 55
[5] Middle School Educational Specifications Focus Group on Arts Education, November 17, 2020.
[6] Ibid, p. 57
[7] Middle School Educational Specifications Focus Group on Arts Education, November 10, 2020.
[8] Seattle K-12 Arts Plan, a collaborative effort of the Seattle Office of Arts & Cultural Affairs and Seattle Public Schools, p. 57

- learn the technical skills to create their own work through the practice of developing digital graphics and media.
- evaluate their work through individual and group critiques.
- prepare a portfolio of their work.

Activities for Instructional Spaces for Performing Arts

Typical music classes offered in SPS middle schools may include:

- Band: Beginning, Intermediate, Junior, Senior, and/or Jazz Band
- Orchestra: Beginning, Intermediate, Junior, Senior and/or Chamber Orchestra
- Choir: Intermediate Choir, Treble Choir, Vocal Jazz
- Guitar Lab

Performing Arts Classroom A / Chorus & Orchestra Practice

A lab/studio environment where students can:

- learn about and develop appreciation for various genres of instrumental and choral music.
- learn the technical skills to play an orchestral instrument properly and with musicality.
- collaborate with others in singing or the playing of orchestral music.
- practice music performance.
- store music instruments utilized in Performing Arts Classroom A/ Chorus & Orchestra Practice.

Performing Arts Classroom B / Band Practice

A lab/studio environment where students can:

- learn about and develop appreciation for various genres of instrumental music.
- learn the technical skills to play a band instrument properly and with musicality.
- collaborate with others in the playing of band music.
- practice music performance.

Ensemble / Mixing Room & Practice Rooms

- practice music performance.

Instrument Storage

- Provides secure storage for music instruments utilized in Performing Arts Classroom B / Band.

Shared Music Library

- Organizing, filing, and storing sheet music and other music media for middle school music programs.

Shared Storage Room

- Storage space that accommodates all music chair carts and music stand carts.

In addition, based upon the Seattle K-12 Arts Plan, arts integration with other disciplines can be anticipated to occur in the following spaces:

Learning Commons and Small Group Collaboration Spaces

- Integration with English/Language Arts, including activities such as groups of 2 – 5 students practicing dramatic parts;
- Visual Arts integration activities, such as drawing, painting, collage, etc.

Outdoor Learning Areas

- Whole-class and small groups of 2 – 5 students practicing dramatic parts, or drawing or painting, when weather allows.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Visual Arts Classroom	1	32	1	1	1,350	1,350
Arts Supply & Project Storage	-	-	-	1	300	300
Kiln Room	-	-	-	1	150	150
Future Digital Arts Classroom*	-	-	-	-	-	-
Performing Arts Practice Room A / Choral & Orchestra	1	Up to 60	1	1	1,600	1,600
Performing Arts Practice Room B / Band	1	Up to 90	1	1	2,000	2,000
Instrument Storage Room - Band	-	-	-	1	400	400
Shared Storage (music stands, chairs, etc)	-	-	-	1	200	200
Music, Practice Room - Ensemble / Mixing	-	Up to 12	-	1	300	300
Music, Practice Room - Small	-	Up to 4	-	4	75	300
Music, Shared Library	-	-	-	1	150	150
Subtotal			**3**			**6,750**

T.S. – Teaching Station
Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities.
*Future Digital Arts Classroom is accounted for within the General Education Classroom count

Refer to "What Do We Do: Student Dining Commons & Stage" for other Performing Arts spaces.

Spatial Descriptions

Visual Arts Classroom/Lab

- Teaching Wall and Presentation Station per "What Do We Do: Instructional Technology."
- Generous daylight, preferably with northern exposure.
- Sinks (two preferred, one of which is deep and extra-large to accommodate more than one student at a time.)

Future Digital Arts Classroom

- Teaching Wall and Presentation Station per "What Do We Do: Instructional Technology."
- A typical classroom that can be converted to a future digital arts classroom.
- Electrical outlets to power to 32 student monitors with small desktop CPU's, along one additional Wireless Access Point to serve CPU's.

Arts Supply & Project Storage

- Shelving for the storage of arts supplies and/or student projects-in-process.
- Flat files for storing large format media.

- Utility carts for moving supplies and projects between the classroom and the storage space.

Kiln Room

- Two ceramics kilns with ventilation hoods.
- Ceramic drying racks.
- Insulated kiln carts.

Performing Arts Classroom, A / Chorus & Orchestra Practice

- Teaching Wall and Presentation Station per "What Do We Do: Instructional Technology."
- Instrument Storage for Orchestra Instruments.
- Provide Sound-Absorbing and Diffusing Wall and Ceiling Panels as designed by acoustical engineer.
- Sound System including recording and playback.
- Deep Sink with Drinking fountain for instrument cleaning.
- Provide built-in instrument storage for district-owned instruments at the room perimeter for:[9]
    - Violin, 3/4 size: 10 each
    - Violin, 4/4 size: 14 each
    - Viola, 14": 6 each
    - Viola, 15": 6 each
- These instruments will be stored on mobile racks to be provided as part of the FF&E. Show racks on FF&E Floor Plan.
    - Cello, 1/2 size: 2 each
    - Cello, 3/4 size: 12 each
    - Cello, 4/4 size: 8 each
    - Bass, 1/2 size: 8 each
    - Bass, 3/4 size: 4 each

Performing Arts Classroom B / Band Practice

- Teaching Wall and Presentation Station per "What Do We Do: Instructional Technology."
- Provide Sound-Absorbing and Diffusing Wall and Ceiling Panels as designed by acoustical engineer.
- Sound System including recording and playback.
- Deep Sink with Drinking fountain for instrument cleaning.

Practice Rooms

- Modular sound-isolation music practice rooms sized for groups of up to 4 students.
- Window into practice room for supervision

Ensemble / Mixing Room

- Modular sound-isolation music practice rooms sized for groups up to 10-12 students.
- Window into practice room for supervision.

Instrument Storage

- Built-in Instrument Storage to accommodate the following district-owned woodwinds and brass instruments:[10]
    - Piccolo: 2 each
    - Flute: 6 each
    - Oboe: 4 each
    - Clarinet (Bb): 10 each
    - Bass Clarinet: 5 each
    - Alto Saxophone: 8 each

[9] Instrument quantities and sizes from "Final Meany MS Music Purchase 5/9/17", to be used as the basis for Ed Spec quantities as instructed by Arts Program Managers.
[10] Ibid.

    - Tenor Saxophone: 6 each
    - Baritone Saxophone: 3 each
    - Bassoon: 5 each
    - French Horn - single: 2 each
    - French Horn - double: 4 each
    - Trumpets: 6 each
    - Trombone: 8 each
    - Bass Trombone: 1 each
    - Baritone Horn: 3 each
    - Euphonium: 5 each
- These instruments will be stored on a mobile rack to be provided as part of the FF&E. Show rack on FF&E Floor Plan.
    - Tuba, 3/4 3-valve B-flat: 2 each
    - Tuba, 4/4 4-valve B-flat: 2 each
- Percussion and Other Miscellaneous Instruments: Larger percussion instruments will sit on the floor in either the band room or the instrument storage room. For miscellaneous smaller instruments such as tambourines and triangles, as well as instrument accessories, provide 8 LF of full height, 24" deep built-in casework with adjustable shelving.
- Preferred to have both an "in" door and an "out" door to allow one-way circulation when students are picking up/dropping off instruments.
- Storage for student-owned instruments: See discussion for Student Lockers for requirement for dedicated lockers in common areas near the music rooms to store student-owned music instruments.

Learning Commons and Small Group Collaboration Spaces

- Provide plenty of natural light to support Visual Arts integration activities, such as drawing, painting, collage, etc.
- Provide tackboards for critiques and display of student work.

Outdoor Learning Areas

- Provide a raised platform to act as an informal stage, and tiered "amphitheater" seating to support informal outdoor presentations or dramatic arts practice, at one of the outdoor learning areas, when space allows.
- Provide informal outdoor seating and work surfaces for small groups to practice drawing or painting, or to work on other types of projects, when weather allows.

Adjacency Description

Visual Arts Classroom/Lab

- The Visual Arts Classroom/Lab shall be located adjacent to Art Supply and Art Project Storage.
- Preferred if the classroom has generous daylight, preferably with northern exposure.
- Preferred if the classroom is located adjacent to an outdoor arts patio that allows for large projects.

Future Digital Arts Classroom:

- The future Digital Arts Classroom shall be a typical classroom near either the Visual Arts Classroom/Lab, or one of the CTE Universal Labs, depending on the school's choice in the Site-Specific Ed Specs development.

Arts Supply & Project Storage

- A support space directly connected to the Visual Arts Classroom

Kiln Room

- A support space directly connected to the Visual Arts Classroom

Performing Arts Classroom, A / Chorus & Orchestra Practice

- Should have some separation from the quieter areas of the school such as the library and main academic classrooms.
- Preferred if they are located near the Dining Commons to provide ease of access for performances.

Performing Arts Classroom B / Band Practice

- Should have some separation from the quieter areas of the school such as the library and main academic classrooms.
- Preferred if they are located near the Dining Commons to provide ease of access for performances.

Practice Rooms

- Located directly adjacent to each of the Performing Arts Classrooms; this is a critical adjacency to ensure that the rooms can be supervised.

Ensemble / Mixing Room

- Located between those rooms, or off a hallway near both classrooms but with line-of-sight supervision from the Classrooms.

Instrument Storage

- Shall have direct adjacency to Performing Arts Classroom B / Band.

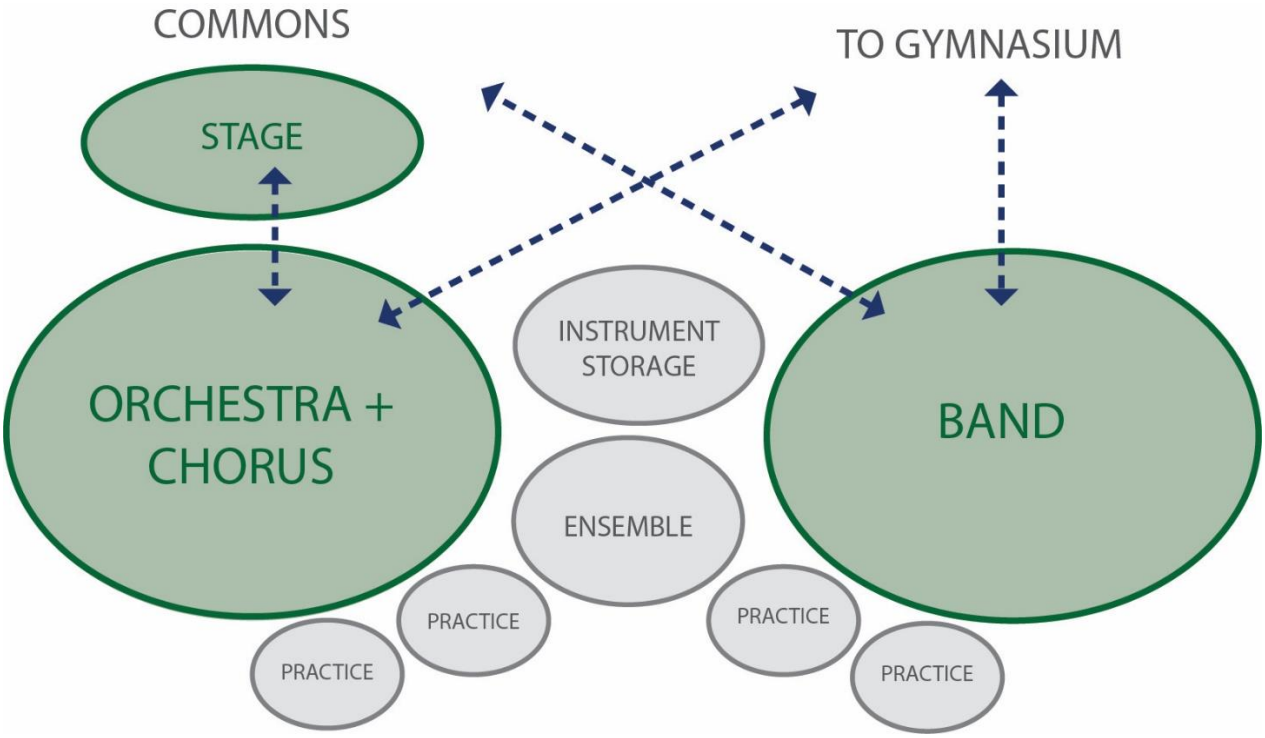
Shared Music Library

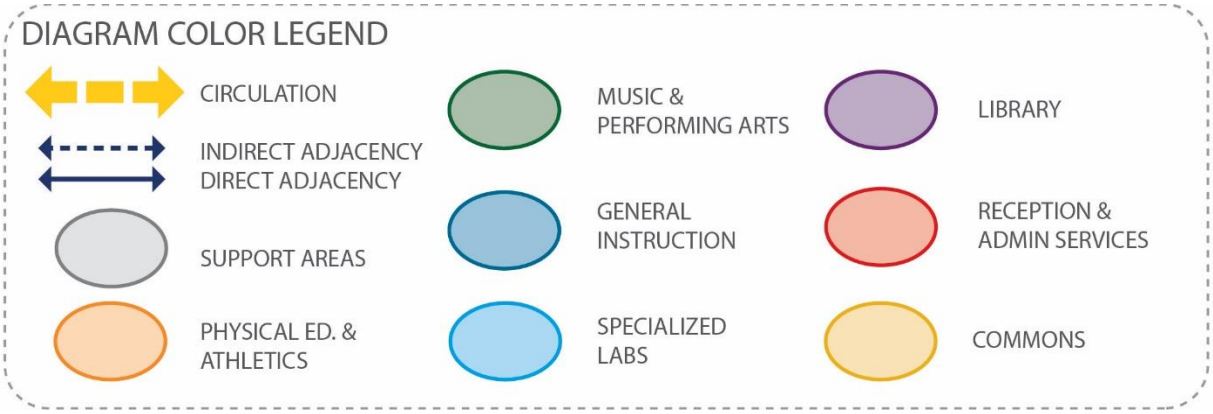
- Located between the Performing Arts Classrooms, or across a hallway accessible from each of the classrooms.

Shared Storage Room

- Located between the Performing Arts Classrooms, or across a hallway accessible from each of the classrooms.

Adjacency Diagram





Physical Education and Athletics

There are three programs and/or partnerships for which activities must be accommodated within the core Physical Education spaces, so requirements for all three programs will be included in this section:

- Physical Education program, which is part of the core academic curriculum.
- Athletics activities, which supplement the opportunities afforded during the regular school day.
- Community use of facilities via a Joint Use Agreement with Seattle Dept. of Parks and Recreation.

Activities and Spatial Descriptions are combined into tables dedicated to each space or site area.

While Washington State integrates Health Education and Physical Education Standards into a single set of standards[1], at Seattle Public Schools Health Education is integrated into the Science curriculum[2]. Health Education Standards are discussed in the Science section.

Excellence in Physical Education, Every Day for All Students[3]

Mission

Seattle Public Schools is committed to providing a daily quality Physical Education program that builds knowledge, fitness, movement skills, social well-being, and confidence so all students can enjoy a healthy active lifestyle.

Student Wellness Policy[4]

The Seattle School Board is committed to the optimal development of every student. The Board believes that for students to have the opportunity to achieve personal, academic, developmental, and social success, we need to create positive, safe, and health-promoting learning environments at every level, in every setting, throughout the school year.

Research clearly indicates tremendous inequities in access to healthy food and opportunities for physical activity in our community. It is the imperative and intention of Seattle Public Schools to mitigate these disparities by providing equitable access to healthy food and physical activity across all Seattle schools, and to mitigate these health and educational disparities by acknowledging where disparities exist within the district and devising plans of action to address, prevent and thus reverse those disparities. Children who eat well-balanced meals and engage in physical activity throughout the school day are generally healthier and more likely to be academically successful**.** To clarify the district's role in supporting students, the following core wellness beliefs are adopted (*only those relating to physical education and activity are excerpted here*):

- Students receive quality evidence-based health education, physical education, and nutrition education allowing them to develop lifelong healthy behaviors.
- Students have adequate opportunities to be physically active before, during, and after school, including adequate recess

[1] Washington State Learning Standards for Health & Physical Education, adopted 2016, www.k12.wa.us > Student Success > Resources by Subject Area > Health & Physical Education > K-12 Learning Standards, accessed November 2020
[2] Middle School Ed Specs meeting with PE Program Manager Lori Dunn on November 4, 2020.
[3] From Seattle Public Schools website > Academics > Curriculum > Physical Education Motto, accessed November 2020.
[4] Seattle Public Schools Policy No. 3405, "Student Wellness," October 7, 2015 on SPS website > School Board > Policies and Procedures > Series 3000 - Students, accessed November 2020.

and regular physical activity breaks.
- Students are provided equitable opportunities for physical activity with appropriate accommodations and modifications to school meals, nutrition education, physical education, and physical activity.
- School staff are encouraged to promote healthy nutrition and support physical activity, including not using food as a reward, scheduling recess before lunch, and practicing healthy celebrations.
- Each school should incorporate a Wellness Goal in their Comprehensive School Improvement Plan (CSIP).

Physical Education Policy[5]

It is the policy of the Seattle School Board that physical education is a core component of a school environment that promotes students' health, well-being, and ability to learn, as well as mitigates education and health disparities.

Therefore, all students shall experience a Comprehensive School Physical Activity Program (CSPAP) including:

1. The opportunity to learn the knowledge and skills needed to establish and maintain physically active lifestyles throughout childhood and adolescence and into adulthood.
2. Opportunities to be physically active.
3. Staff involvement.
4. Family and community engagement; and
5. A culture of health and wellness in every school.

Adapted physical education will be included as part of individual education plans for students with chronic health problems, other disabling conditions, or other special needs that preclude such student's participation in regular physical education activities.

For more detailed background information and implementation strategies for CSPAP, see previous section "What Do We Know – Moving to Promote Lifelong Fitness."

Physical Education Program[6]

The program goals will be accomplished by:

Knowledge

- A K-12 articulated written curriculum aligned with state standards (i.e., nutrition, goal setting, five components of fitness)

Physical Fitness

- Progressive physical fitness skills articulated from K-12.
- Fitness measurements are used to track students' fitness.
- Implementation of personal fitness plans at middle and high school.

Fundamental Movement Skills

- Developmentally appropriate progressive motor skills K-12
- Team, individual and lifetime activities that build the habit of an active lifestyle.
- Social Well-being: Improving social relationships, and emotional well-being through active engagement in physical activity.

The educational community will support student learning by:

- Community and parents modeling healthy physical and nutritional behaviors.
- School board members, administrators, classroom teachers, nutritional services, counselors, nurses, and social services supporting coordinated school wide involvement in improving students' fitness and health.
- Maintaining clean, safe, and adequate equipment and facilities for all students.

[5] Seattle Public Schools Policy No. 2185, "Physical Education," June 4, 2014 on SPS website > School Board > Policies and Procedures > Series 2000 - Instruction, accessed November 2020.
[6] From Seattle Public Schools website > Academics > Curriculum > Physical Education, accessed November 2020.

- Providing all students the opportunity to reach Physical Education program goals by not allowing compromised scheduling, substitutions, or inadequate time.

The overall purpose of the physical education program is to create an exemplary program that sets the benchmark for excellence in physical education.

Curriculum Standards

Washington State Physical Education K-12 Learning Standards[7]

SHAPE America's (Society for Health and Physical Educators) National Standards define what a student should know and be able to do as result of a quality physical education program. States and local school districts across the country use the National Standards to develop or revise existing standards, frameworks, and curricula. While many of Washington state's specific grade-level outcomes have been revised from the originals, the National Standards have been adopted verbatim as the Washington State Physical Education K–12 Learning Standards.

Middle School activities associated with each standard are highlighted.

Standard 1: Students will demonstrate competency in a variety of motor skills and movement patterns, including Games & Sports, and Lifetime Activities.

Standard 2: Students will apply knowledge of concepts, principles, strategies, and tactics related to movement and performance, also within the domains of Games & Sports, as well as Lifetime Activities.

Standard 3: Students will demonstrate the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

Standard 4: Students will exhibit responsible personal and social behavior that respects self and others.

Standard 5: Students will recognize the value of physical activity for health, enjoyment, challenge, self-expression, and social interaction.

Physical Education Curriculum

In 2007 Seattle Public Schools Physical Education Program adopted the Five for Life Curriculum and WELNET Software for PreK-12th grades. "Five for Life" is a research-driven, standards-based curriculum designed to teach the principles of health and fitness while continually improving students' fitness levels. Based on the five components of fitness—cardiovascular endurance, muscle strength, muscle endurance, body composition and flexibility—it incorporates fitness-related activities and motor-skill development with academic content. Students are taught meaningful fitness concepts which empower them to make healthier choices.

The basic curriculum introduces students to the skeletal and muscular systems while stressing the importance of nutrition and physical activity. Students learn how to set and achieve goals, and to measure their improved fitness levels with technology such as heart-rate monitors and pedometers. Units and lessons are designed to blend health and fitness concepts into activity time.

[7] Washington State Learning Standards for Health & Physical Education, adopted 2016, www.k12.wa.us > Student Success > Resources by Subject Area > Health & Physical Education > K-12 Learning Standards, accessed November 2020.

Unlike traditional PE programs that emphasize group or team competition, in "Five for Life" students compete against their own past performances to reach their fitness goals. Each student performs pre-fitness measurements in the fall, sets goals for improvement, and performs post-fitness measurements in the spring.

The advanced program continues the goal setting and fitness measurements while adding a record-keeping element to analyze personal behavior. Documenting their diet, sleep, activity, and hydration logs, students can see how their nutrition choices and daily habits affect their health, performance, and appearance. The program can be customized to meet individual students' personal needs and includes a Web-based component that provides students the opportunity to track and assess their results throughout their tenure in the district.

Typically, 6th, 7th, and 8th grade students participate in Physical Education classes one semester per school year.

Athletics[8]

Studies show that students participating in athletics have higher grade point averages, better attendance, lower dropout rates, fewer disciplinary problems, higher graduation rates, and better success in college than non-participants. Providing healthy, supervised after-school activities for students does this. Athletic participation teaches teamwork, goal setting, discipline, sportsmanship, leadership, and other valuable life-skills, helping students become contributing members of their school and community as well as providing an important alternative to anti-social behaviors. The Athletics department coordinates with schools to provide programs for this valuable portion of a student's extra-curricular life.

Goals

Our vision is excellence in academics and athletics by connecting students to academics through an exceptional athletic program. To meet this vision our mission and goals are:

- Transform: Providing an exemplary athletic program with maximum student participation.
- Enable: Utilizing the individual and group skills and knowledge of our athletic coaches, teaching staff, and community to encourage excellence both in the classroom and on the playing field.
- Operate: Coordinating an all-encompassing athletic program at both the middle school and high school levels.
- Productivity: Encouraging academic and athletic excellence for all participating students.

Programs

Athletics works with all of the middle and high schools within Seattle Public Schools, and also partners with Seattle Parks and Recreation in providing a developmental participation program at the middle school athletic level.

The athletic sports typically offered in middle schools include:

- Basketball (Girls) (Boys)
- Volleyball (Girls)
- Soccer (Girls) (Boys)
- Ultimate Frisbee
- Track Practice

MS Athletic Coordinators: every school has someone in that part-time role, usually a teacher or Assistant Principal. Approximately 60% of the coordinators are PE teachers, so they already have a planning & prep space within the PE staff office area. For the others, provide a small mobile standup table within the Athletic Storage area as "touch-down" place to have their laptop when they are not working from their classroom or office.

Athletic Coordinators and Coaches do not need shower/changing facilities at the school.

[8] From Seattle Public Schools website > Students > Extra Curricular Activities > Athletics.

Activities & Descriptions for Instructional Spaces

The "Seattle Public Schools' Middle School Physical Education Curriculum Map" can be found in its entirety in the SPS Physical Education PreK-12 Curriculum Guide.[9] Below is a summary of the primary activities that are utilized in the curriculum to deliver instruction to meet the standards, organized by the space that should be designed to accommodate the activities.

Additional activities to support assemblies, community gatherings, and other activities outside of the Physical Education curriculum are also included below.

Activities within the Gymnasium

During the School Day

- Direct instruction
- Basketball
- Volleyball
- Indoor soccer/futsal
- Racquet sports: Pickleball, badminton, indoor tennis.
- Cardio fitness activities with machines rotated among school sites.
- School assemblies

After-Hours Use

- Athletics & community use for basketball games
- Athletics & community use for volleyball practice games

Activities within the Gymnasium "Zone"

Fitness Room

- Fitness and assessment through lecture, demonstration, and use of instructional technology and equipment.
- Yoga, Pilates, body awareness
- Use of climbing wall (horizontal traverse)
- Cardio fitness with jump ropes, small handheld weights
- Cardio fitness equipment activities
- CPR instruction

Student Lockers / Changing Room

- Students change into and out of PE clothes.
- Storage of personal clothing and athletic gear during PE class or athletic events.

PE Staff Office, Shower / Toilet, & Lockers

- Staff develop and prep for student PE class and athletic events.
- Staff shower and change into and out of PE clothes.
- Storage of personal clothing and effects.

Storage:

- Physical Education Storage: PE materials and equipment are stored in this space when not in use.
- Athletic Equipment & Uniform Storage: these are stored in this space when not in use. Mobile standing desk provided for "touch-down" space for Athletics Coordinator.
- Community Partner Storage: equipment and supplies are stored in this space when not in use.

[9] SPS Physical Education PreK-12 Curriculum Guide, available in hard copy from the Physical Education department.

Activities at the outdoor playfields / courts

Outdoor Playfields:

- Soccer
- Softball, if space allows or T-ball, on soccer field if space is insufficient for softball.
- Lacrosse (soft)
- Cricket
- Flag football
- Golf practice (chipping, putting, sometimes driving)
- Track and field events

Outdoor Paved Area:

- Pacer training for cardio endurance
- Half-court basketball (2 each if feasible)
- Badminton using portable nets

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Main Gymnasium	2	Up to 32	2	2 sides	4,250	8,500
Fitness Room	-	Up to 32	1	1	2,400	2,400
PE & Athletics, Student Lockers/Changing	-	Up to 32	-	2	1250	2,500
PE & Athletics, Student Showers/Toilet	-	Up to 4	-	2	150	300
Staff & All-Gender Toilet/Changing/Shower Rooms	-	-	-	2	130	260
PE (& Athletics) Staff Office & Lockers	2	-	-	2	150	300
PE (& Athletics) Staff Showers/Toilet	-	-	-	2	85	170
PE, Equipment Storage	-	-	-	2	350	700
Athletics Equipment & Uniform Storage	-	-	-	1	250	250
Community Partner Storage at Gym	-	-	-	1	300	300
Outdoor Equipment Storage, PE & Athletics (unheated)	-	-	-	1	120	120
Required Subtotal			**3**			**15,800**

T.S. = Teaching Station
Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities.

Spatial Descriptions

To support the Physical Education and Athletics programs, a variety of indoor and outdoor areas are required.

Gymnasium & Fitness

Gymnasium

Group Instruction

- (2) Whole-Class Instruction Areas (teaching station for each side of the gym divider curtain):
  - Includes whiteboard, tackboard, presentation station on cart
  - Divider curtain between teaching stations

PE / Athletics Activities

- Basketball
  - Basketball Whole Court (Athletics)
    - Glass backboards at ends of court

        - Provide one scoreboard and two shot clocks.
        - Allow clear floor area from court lines:
            - 5' width at sides
            - 10' width at ends
            - 10' width of protective mats behind each backboard; type per SPS Technical Building Standard (TBS) 11480 Gymnasium Equipment
    - Basketball Half Court (PE Cross-Courts)
        - Basketball backboards for each PE court; type per SPS Technical Building Standard (TBS) 11480 Gymnasium Equipment
        - 10' width of protective mats behind each backboard; type per SPS TBS 11480.
- Volleyball
    - Main Court: Floor insets with volleyball standards and nets
    - PE Cross-Courts: Mobile standards with wheels for PE volleyball nets (no floor inserts)
- Indoor soccer/futsal: no special equipment needed.
- Racquet sports: Pickleball, badminton, indoor tennis: Gym floor striping for three cross-courts per gym court game line diagram below.
- Cardio Fitness
    - Machines rotate among school sites: three-week unit with stationary bicycles (set of 30); two-week unit with rowing machines (set of 20-25)
    - Sufficient space for cardio equipment to stack against wall without inhibiting community use of main court.
    - Access for trailer to deliver equipment directly into the gym. Also parking space for trailer to remain on site.
- Gym floor striping per gym court game line diagram below.
- Provide 25' clear ceiling height below structure.
- No windows or relites below 3'-0"
- Protective covers over lighting fixtures.

Assemblies

- Bleacher Seating for 300 to 600 students (site-specific determination).
- Retractable ceiling-mounted projector suitable for large screen display with brightness sufficient to avoid need for blackout shades.
- High quality sound/public address system with "3" of microphones
- No special lighting.
- Protective floor covering for the wood floor.

Fitness

- Teaching station including whiteboard, tack board, presentation station on cart.
- Provide storage for individual Yoga mats on carts.
- Climbing wall
    - Wall height not greater than 8'
    - Wall length is approximately 40' with protective cover when not in use.
    - Provide fall protection mats below wall.
- No mirrors or dance barres are needed.

Support Spaces

PE Staff Office & Lockers

- Provide two full height for each of a potential 2 PE staff per locker room side, i.e. total four lockers.
- Provide two workstations in each office.

Student PE & Athletics Locker Room & Showers/Toilet

- 3 showers per locker room; all should be private with a curtain that allows seeing a student's feet.

- PE Lockers:
  - All full and half height- lockers shall be 15" wide.
  - Calculation: 1000 student capacity divided by 2 semesters divided by 6 periods per day (least number at middle schools) = 83 PE lockers; divided by two locker rooms - minimum 42 sets of lockers per locker room.
  - Each set of lockers shall include (1) half height locker (for street clothes) and 6 basket size lockers (for PE clothes).
  - Lockers around the perimeter can stack two half height lockers, and lockers in the middle of the room shall be only a single half height to allow for supervision sightlines above lockers.
- Athletics lockers should be larger to accommodate gear: 18" w x 15" d or 18" w x 18" d.
  - Provide (20) full height lockers and (30) half height lockers in each of the two locker rooms.
  - Athletics lockers shall be grouped separately within each locker room.

Storage – PE equipment

- Large storage room with high bay storage.
- If PE spaces are distributed on different floors, then provide two separate PE storage rooms totaling the allotted area.
- Need to be able to inventory PE team sports equipment (basketball, volleyball, etc.)
- Heavy-duty ceiling-mounted hooks for hanging nets to store balls; quantity as shown in SPS FF&E Standard Space Types.
- Twelve heavy-duty wall-mounted hooks for hanging equipment.
- Location of sound system and A/V controls is site-specific.

Storage – Athletics Equipment & Uniform

- Utility shelving for equipment storage
- Mobile racks for uniform storage
- Four heavy-duty ceiling-mounted hooks for hanging nets to store balls.
- Twelve heavy-duty wall-mounted hooks for hanging equipment.

Storage – Outdoor Equipment

- Utility shelving for equipment storage
- Four heavy-duty ceiling-mounted hooks for hanging nets to store balls.
- Twelve heavy-duty wall-mounted hooks for hanging equipment.

Outdoor Spaces

Fields

- Soccer Field
  - US Youth Soccer Association Field Size U-14 size: 50 yards x 100 yards competition field if site area allows.
  - If site area does not allow for competition field, practice field size: 25 yards x 50 yards minimum.
- Softball Field
  - Softball field size: 60' bases with a 200' outfield fence (1.5 acres)
  - Softball field can overlap the soccer field if necessary. If there is an overlap, then both fields shall be artificial turf.
  - If site area does not allow for softball field, then place markings to delineate the outlines of T-ball field on the soccer field.
- Lacrosse
  - Uses soccer field with mobile nets and cones to delineate outlines of lacrosse field.
  - Allow for site area around the perimeter to store soccer goals when not in use.
  - Sticks stored in movable garbage cans, along with net storage in shared outdoor equipment storage space.
- Cricket: Set up with props within boundaries of soccer field; no special considerations.
- Flag Football: Played within boundaries of soccer field; no special considerations.
- Golf Practice: Uses chipping platforms; storage in shared equipment storage space.
- Track and Field: No reason to provide a track for P.E. and Athletics. Track and Field Athletes practice and have meets

off site, so a running track is not a requirement. If site area and budget allow, it is desirable to provide at least three lanes of whatever distance is available.

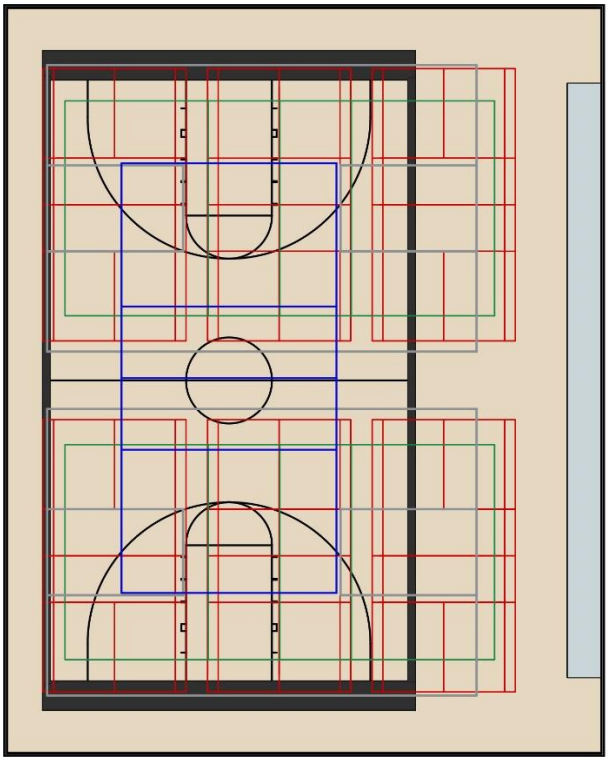
- When sites are tight and the above field sizes are not able to be met, design teams shall confer with SPS Physical Education and Athletics Program Managers to determine site-specific tradeoffs to provide optimum facilities.

Courts or Outdoor PE Area

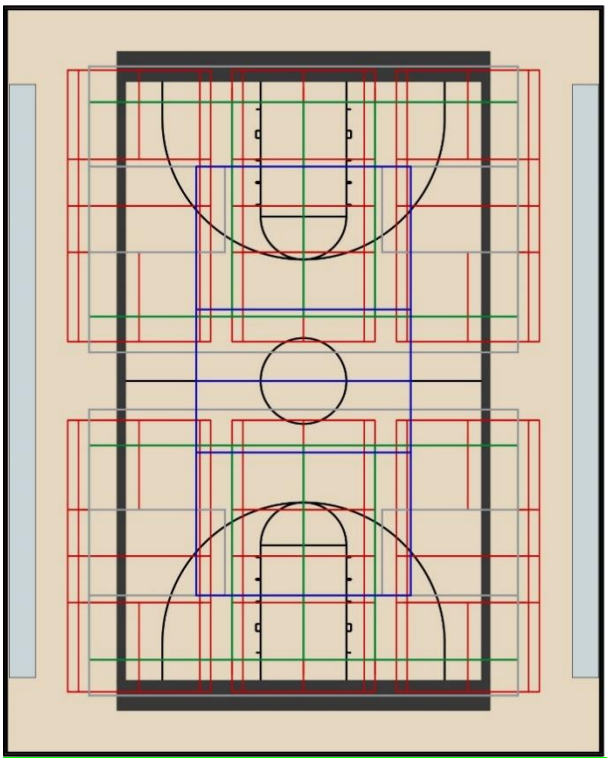
- Striped running lanes minimum 25 yards long and 3' wide for fitness assessments; quantity up to 4.
- Half-court Basketball Courts
  - Provide at least two basketball half-courts if site area available; if not, then two three-point practice shooting areas.
  - Consider covered courts if site placement allows.
- Badminton area using portable nets: No special considerations.

Game Court Diagrams

Off center court – single set of bleachers



Centered court – split bleachers



Adjacency Descriptions

General – Overview

- To support the PE and Athletics programs, a variety of indoor and outdoor areas are required.
- Facilities must also be designed with community use during non-school hours in mind.

Gymnasium

- Direct connection to main corridor servicing student locker rooms, and staff offices
- Direct access to storage rooms
- Direct access to outdoor PE & athletic facilities

Fitness Room

- Direct connection to main corridor servicing student locker rooms, and staff offices

PE Staff Office & Lockers

- Direct physical and visual connection to student locker rooms for student supervision

PE Staff Showers & Toilet Room

- Shared facility that is directly connected to respective offices, but that can be zoned/locked for after-hours use.

Student PE & Athletics Locker Room & Showers/Toilet

- Provide one way in and one way out to help monitor who is in the locker room.
- Provide locker room access from a main hallway, not from within a gym space.
- No direct access to/from the outside is desired.

Staff/ All-Gender Toilet/Shower Rooms

- Locate so that students can access from same circulation pathway between gym and locker room used by other students.
- Location accessible for staff that bike to school to shower or change.

Storage – PE equipment

- Locate adjacent to gym and near access to outdoor athletic facilities.

Storage – Athletic Equipment & Uniforms

- Locate near gym.
- Accessible from common hallway so that uniforms for any gender can be accessed.

Storage - Community Partners

- Accessible from common hallway near one pair of double doors to gym

Storage – Outdoor PE and Athletic Equipment

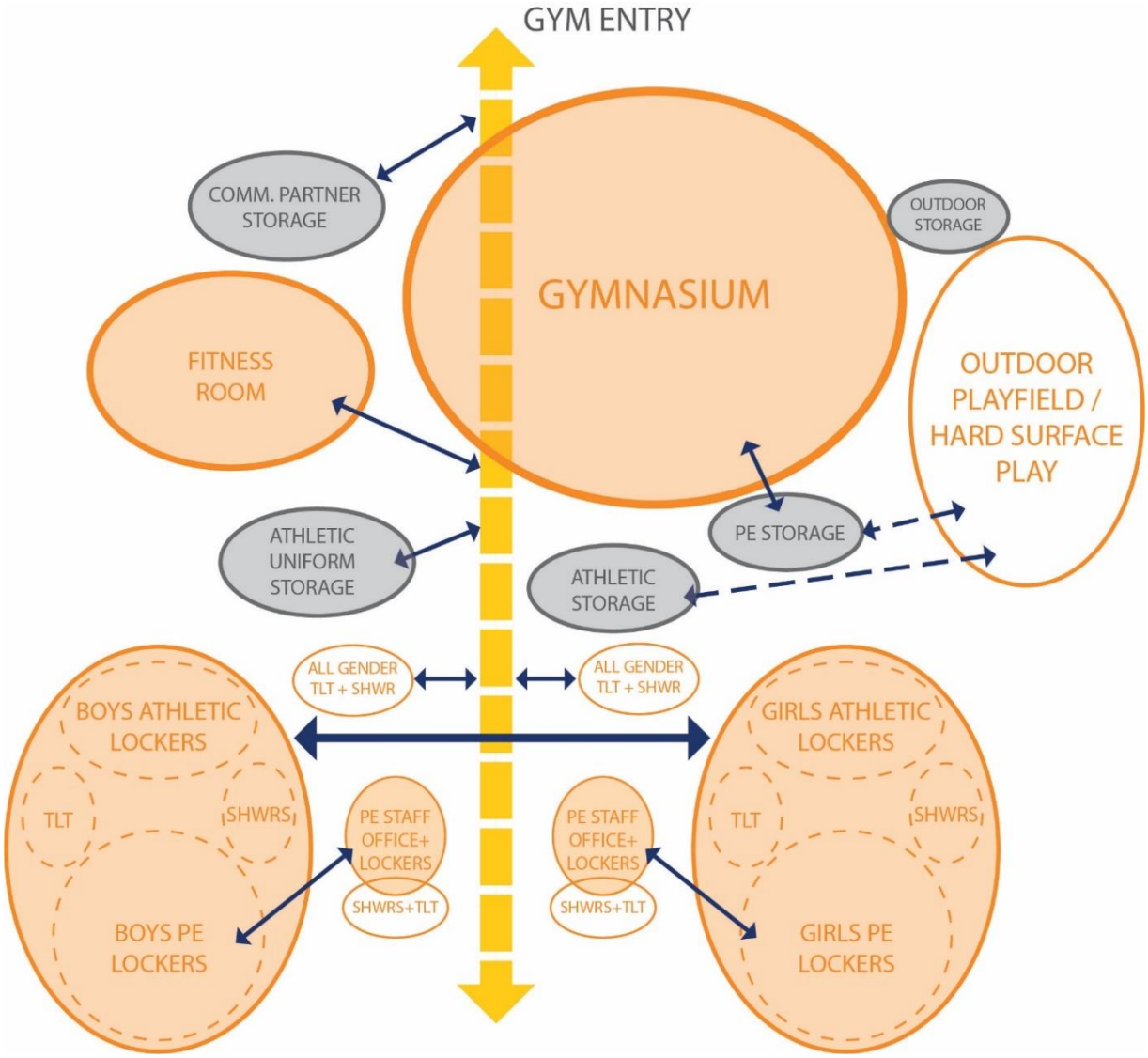
- Locate near outdoor athletic facilities, preferably with convenient access from outdoors.

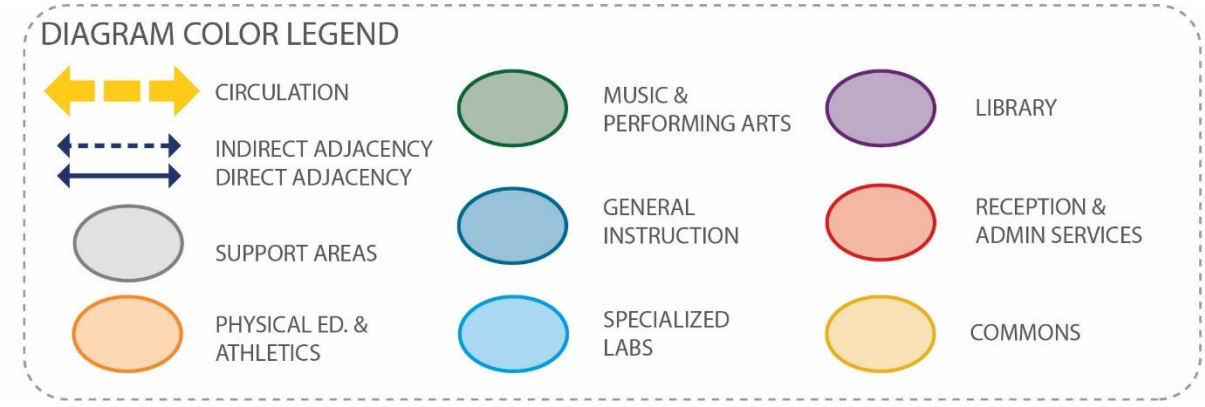
Outdoor Playfield and/or Hard Surface Play Area

- Near corridor serving Main Gym, Fitness Room and/or Student Locker Rooms

Adjacency Diagram

Note: Facilities must also be designed with community use during non-school hours in mind since there is a high demand.





Library and Information Services

"A library is not a luxury but one of the **necessities of life**." – Henry Ward Beecher

District Goals[1]

Library Services strives to promote the exploration of ideas, the power of information and the love of reading and learning.

- Provide students and staff seamless access to the information resources they need, when and where they need them.
- Build strong libraries in every school that foster lifelong readers and effective users of information.

Library Media Center Policy[2]

The Seattle School District library/media centers will be used to support and extend the classroom program of instruction. Each center will provide a broad range of instructional equipment and learning resources to support the school curriculum and meet the unique needs of students.

Each district library/media center will be appropriately staffed to assist teachers and students in the use of the collection, as well as in the completion of teacher and/or student assignments. The Teacher-Librarian and the library media staff will assist students and teachers in securing a variety of resources which support student mastery of the essential academic learning requirements and the implementation of the district's school improvement plan. Additionally, the Teacher-Librarian, through the school library media program, will collaborate as an instructional partner and information specialist to help all students meet the content goals in all subject areas, provide information, (and) technology literacy instruction.

The Changing Role of Libraries

The library serves multiple roles within a school – its traditional roles as a place for research and learning, an instructional space , and a meeting/gathering place, and newer roles as a technological information hub, and a creative collaboration zone for hands-on projects. The modern school library - its resources and especially its staff - is the academic heart of the school and its extended community.

> *"Libraries are responding to the ever-changing needs of children and teens. Summer reading, a longstanding campaign in public libraries, is evolving into summer learning. Summer programs have flourished in recent years; they now integrate traditional reading activities with others that explore such special interests as the arts, STEM (science, technology, engineering, and math), and digital learning."*[3]

Character

The middle school library should occupy a place of prominence as an expression of its value and importance, and to reinforce the academic mission of the school. It is equally important that it be accessible to encourage ease of use. The entryway should be transparent and welcoming; narrow gateways and book detection systems to control access are a practice to be left in the past.

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[1] "About SPS Library Services" *Seattle Public Schools: District: Departments: Library Services*; website November 2020.
[2] Seattle Public Schools Policy No. 2021, "Library Media Centers," December 7, 2011. SPS website>Our District>School Board>Policies and Procedures>Instruction>Library Media Centers; November 2020.
[3] Wang, Yizhu. "School Libraries Are Transforming into Digital Hubs." EdScoop. Scoop News Group, 11 Apr. 2016. Web. 11 Apr. 2016.

The library should be warm, inviting, and comfortable to encourage student use. The library should have plenty of well-controlled natural light, balanced with artificial lighting to provide an optimal environment for reading or viewing information on screen. Accent lighting should be utilized to draw attention to displays or artwork.

While national trends are pushing towards increased digitization of materials, school libraries still maintain extensive hard-copy collections. The presence and visibility of the stacks is a key signifier that imparts a distinctive, respectful quality to the space, but their placement should not impart an overly formal quality to the space. Ample display opportunities should be integrated near the entrance, circulation desk and other key areas to showcase items from the collections and spark curiosity.

Flexibility

Educators desire libraries to be comfortable gathering spaces that support multiple functions throughout the day. Design for flexibility whenever possible. The library is often a place of refuge for students that arrive early to campus and stay late each day; a safe space where they can access resources, work independently or simply indulge in pleasure reading.

During school hours, the library must accommodate both individuals and groups, as well as up to two full classes at the same time. After school hours, the library may shift roles again to support an all-staff meeting, a community open house, a club meeting.

To support flexibility, the library must be strategically located so it can be zoned to support after-hours use. Ideally the library is visible from the exterior of the school, if not immediately from the main entrance.

Supervision

Library staff must have clear sightlines from the main circulation desk and their work area across the entire space. While the activity zones may be physically separate for acoustical reasons, they should still be visually connected for supervision.

Restrooms should not have a direct connection to the library because it is not the librarian's role to supervise them. Restrooms should be located near the library, accessible from a main hallway, and preferably within a "Library Zone" that could be accessible after hours, while other unoccupied spaces would be inaccessible.

The Social Dimension

Just as classroom teachers have shifted to collaborative group assignments, so have librarians embraced what Scott Bennett refers to as the "social aspect" of learning. He writes that current library models have arrived at "… a recognition of the essential social dimension of knowledge, and learning is the primary activity, and where the focus is on facilitating the social exchanges through which information is transformed into the knowledge of some person or group of persons."[4]

While the need to provide areas for quiet, concentrated study is still present, balanced attention should be paid to areas that support social interactions within the context of learning.

Information Services

Information literacy and lifelong learning[5]

The school library is a setting that supports the development of information literacy through providing access to a curated set of books and periodicals, as well as selected digital resources, with the librarian to mentor students in evaluating the validity of information. Further, exposure to a broad array of resources can spark curiosity and allow students to construct meaning from their classroom studies as they better understand the connections to the wider world. For more discussion on Information literacy, refer to section "What Do We Know – Planning for Tomorrow's Technology Needs."

See "Other Activities and Spaces within the Library Zone" below for Information Technology Support.

Digital Equity

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[4] Bennett, Scott. "Libraries Designed for Learning." Editorial. *Http://www.clir.org/pubs/reports/pub122/pub122web.pdf*. Council on Library and Information Resources, Nov. 2003. Web. 14 Apr. 2016.

[5] Lau, Jesus. "Guidelines on Information Literacy for Lifelong Learning." *Http://www.ifla.org/publications/guidelines-on-information-literacy-for-lifelong-learning*. International Federation of Library Associations and Institutions, July 2006. Web. 15 Apr. 2016.

As of 2020, Seattle Public Schools has provided individual laptop computers to all middle school students and has loaned out hotspots to students and families as needed. It is anticipated that SPS will continue to provide hotspots until local governments succeed in improving Wi-Fi infrastructure that provides more equitable access through all areas of the city.

Physical library/media resource locations will be searched through either the Online Public Access Catalog (OPAC) locations (described in further detail below) or via each student's individual laptop. Digital resources will now be accessed via use of student and staff laptops.

Activities within the Library

During the School Day

- Whole-Class Instruction
- Collaborative projects such as puzzles, board games, and the like, at tables and casual seating.
- Independent reading/research and/or student laptop use
- Small group collaboration on research or class projects.
- Circulation & Librarian Workstation: student checkout with scanners as well as traditional staff checkout of books, as well as workstation for librarian and assistant.
- Stacks (fixed and mobile): Active book storage and display.
- Display: Area specially designed to draw attention to featured books and other media.
- Workroom: Book repair, storage of materials and equipment, private phone calls.

After-Hours Use

- Large-group meetings after hours, including all-staff meetings as well as community meetings for up to 100 people.
- Club meetings

Other Activities within the Library "Zone"

Information Technology Support

- Provide information technology (I/T) support for staff and students.
- Provide on-site computer and peripheral device troubleshooting and repair.
- Facilitate student laptop distribution (beginning of school year) & re-collection (end of school year).
- Image, charge, then store all student devices during the summer.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Library: Group Instruction, Reading, Circulation, Stacks	Up to 3	Up to 75	-	1	4,500	4,500
Workroom	1	-	-	1	250	250
School-wide Flex Classrooms, or optional makerspace	Up to 2	Up to 64	Up to 2	Up to 2	900	1,800
Conference Room, Medium	Up to 8	Up to 8	-	1	180	180
Conference Room, Small	Up to 6	Up to 6	-	3	120	360
Information Technology Support	Up to 2	-	-	1	200	200
Technology Equipment Storage	-	-	-	1	150	150
Required Subtotal			**2**			**7,440**

T.S. = Teaching Station

Spatial Descriptions

Within the Library

During the School Day

Each of these zones must be visible from within the library so that the librarian can simultaneously supervise students engaged in a variety of activities.

Main Library Space

- Whole-Class Instruction Area: Zone with tables and chairs arranged in groupings of 4 students, for a total of up to 32 students, with a focus on a teaching wall.
- Project Area: Should accommodate 6-12 students at tables and casual seating, and preferred if it could accommodate an entire class with a teaching wall if space allows. Allow space for mobile digital display units for student use.
- Independent Reading/Research Area: Should accommodate 6-12 students at a time, with a combination of soft seating and small individual tables and chairs. This zone is in a quieter section of the main library away from the whole-class instruction and project areas.
- Small Group Collaboration Area: should accommodate one or two groups of 4 to 8 students at tables and chairs with mobile easels or double-sided whiteboards/display screens to support collaboration.
- Provide ample power and data access points at perimeter as well as in open floor area and seating zones. Prefer open areas to access power from the perimeter rather than floor outlets.

Circulation & Librarian Workstation:

- Include workspace for two adults (a librarian and an aide), with space to pass books across the counter.
- Accommodate 2 laptops and monitors for staff, and 2 laptop & handheld scanner checkout stations for students on the student side of the circulation desk.
- Should not be fixed casework. Prefer modular, mobile furniture for flexibility.
- Modular circulation desk shall have pencil drawer and file drawer that may be separate from the desk, and mobile
- Clear sightlines to student work areas

- To provide power, floor outlets are challenging, so providing a couple of location options with stem walls would be preferred.
- A mobile book drop is preferred, so it can be accessed by students from outside the library and brought inside for check-in and re-shelving of books.

Workroom:

- Prefer enclosed/lockable for a secure location for valuable equipment as well as staff personal belongings.
- Maintain transparency so the librarian can supervise the library while completing a task or making a phone call.
- Base and upper cabinets for storage of project materials and technology, with countertops for workspace, and a sink. Provide one lockable base cabinet for secure storage.
- Needs a deep table for book processing.

Stacks:

The stacks serve an important role in defining spatial boundaries within the library. Based on recommendations from the Library Services manager, at least 50% of the stacks should be full height and located on perimeter walls to maximize floor area for other activities. The balance should be accommodated in medium height, mobile units that can be used to divide activity zones, and over which sight lines are maintained for supervision. Ensure single source specification for both fixed shelving and mobile units.

Shelving capacity should be at minimum 14,000 volumes and at maximum 18,000 volumes to allow sufficient floor area for other activity zones**.** Target capacity for each middle school project shall be as agreed with Library Services in the schematic design phase of the project**.** Design teams must demonstrate, as a part of their design review submittals, that shelving capacity has been provided as follows:

- All shelving will be adjustable height, but for capacity calculations all shelves must be calculated at an assumed 12" clear height.
- Top of perimeter shelving shall be not more 80" high for middle schools.
- Mobile shelving shall be not more than 44" high.
- Linear foot quantities allow for 1" per book on average, 15% expandability per shelf for adequate access and display, and 10% growth of the collection.
    - At 14,000 volumes, provide 1,500 LF of 12" clear height shelving.
    - At 16,000 volumes, provide 1,700 LF of 12" clear height shelving.
    - At 18,000 volumes, provide 1,900 LF of 12" clear height shelving.

Display:

- Provide display/marketing space designed to draw attention to featured books and other media, either in casework or in wall niches.
- Provide a minimum of 10 LF full height. It is preferred that primary display space be located near the library entrance to maximize visibility.

Book Detection System:

No longer recommended for libraries at any grade level with Seattle Public Schools. It is more important that the library feel accessible and welcoming.

Online Public Access Catalog (OPAC) Use:

Devices are iPads mounted to a portable stand, or directly to the end of a shelving unit, as preferred by Library Services and the school librarian. Distribute stands for 4-5 OPAC devices throughout library. Students may also use their laptops to access the catalog.

After-Hours Use: All furnishings and shelving units that are not fixed around the perimeter must be mobile in order that the space can accommodate large group meetings.

Other Spaces within the Library Zone of the School

Information Technology Support

Students and staff must have adequate access to technology support to reap the full benefits of digital services. Provide a walk-up help desk model that is located near or directly adjacent to the library.

Technology Information Support Center shall accommodate:

- Hardware Support:
  - Student laptop distribution & re-collection: locate the Information Technology Support space near or directly adjacent to the Library so library tables can be utilized for setup, distribution, and re-collection of student laptops.
  - Equipment troubleshooting and repair: Along one long wall, provide a service counter with a sliding window secured with a roll-down and locking shutter. (Note: requested dutch door is less secure than a shutter.)
  - Laptop charging: charging carts in classrooms will no longer be utilized, so along the wall opposite from the service counter, provide a double work counter with outlets for charging up to 30 laptops at one time, as well as 4 ethernet data drops to support imaging of laptops. Counter shall have knee space for two I/T staff to sit at stools. The remaining undercounter space shall have drawers to store keyboards, mice, and cables.
  - A dedicated wireless access point shall be provided for this space.
- Technology Equipment Storage: Student laptops will be retained and stored at each school during summer break. Provide separate but directly connected storage room with full height shelving along one wall sufficient to store 1,000 laptops, as well as up to 12 additional 21" monitors. Laptops will be charged before summer storage, so providing outlets at storage shelving is not necessary.
- Software and Network support services when IT staff are available:
  - In addition, every middle school will have a Technology Support Services (TSS) staff person. This person serves four to six schools with the middle school Technology Support space serving as their home base.
  - The district provides a central help desk accessed by phone or email and staffed from the John Stanford Center.

Adjacency Descriptions

Main Library Space

- The library is both an educational space and a meeting area. It should be centrally located so that students can easily gain access from any academic area, and it should be highly visible to celebrate its importance as the academic hub, creating a recognizable place for learning. As a place for quieter activities, it should also be removed from noisier areas such as the gym, music, the kitchen, and playfields.
- For after-hours and community use, it should be located with easy access from the main entrance. A controlled path from the main entrance is preferred. It is also preferable if the library and nearby restrooms can be zoned such that after-hours use limits access to other areas as much as possible.
- Circulation Desk - Prefer near main library entrance
- Library Workroom - Adjacent to main library with supervision sightlines into entire library space.

The following spaces should be located within the same building security zone as the Library.

Information Technology Support Center

- A direct connection to the library is desirable, but not required, to support distribution and re-collection of student laptops at the beginning and end of each school year.If a direct connection is not feasible, then the support center should have easy access for using the whole-group instruction area.

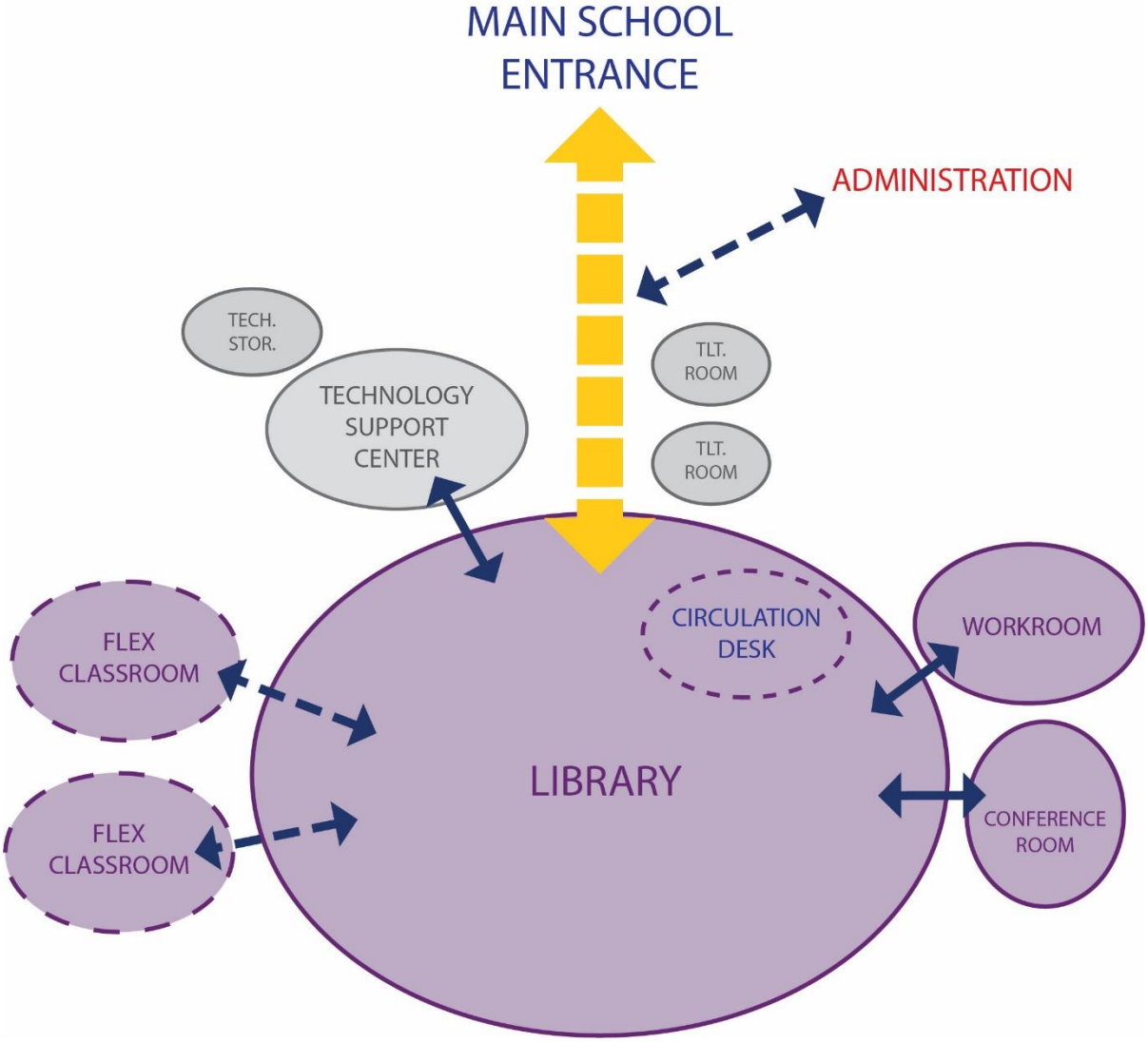
Technology Equipment Storage

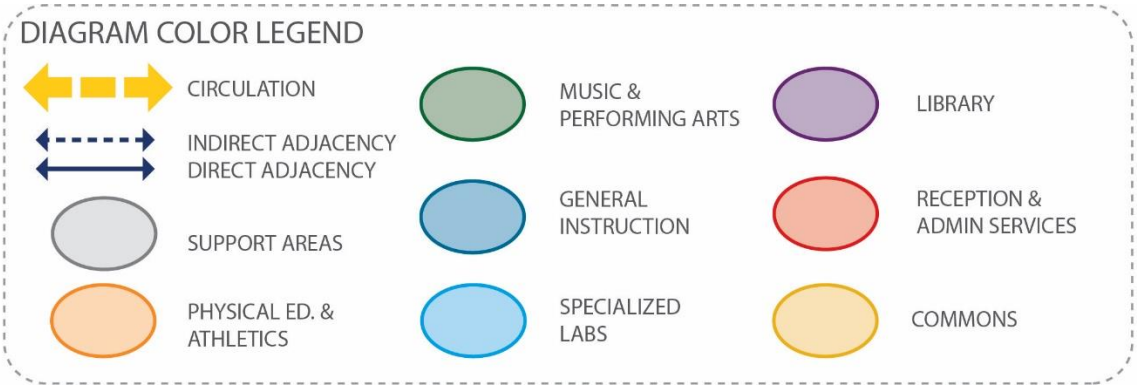
- Locate directly adjacent to the Technology Support Center, with no other doors or windows for access.

Restrooms for Students and for After-Hours Community Use

- Connected to an adjacent corridor, but not directly to the Library.

Adjacency Diagrams





Student Dining Commons and Stage

"There is something profoundly satisfying about **sharing a meal**. Eating together, breaking bread, is one of the oldest and most fundamentally **unifying of human experiences**."[1] - Barbara Coloroso

Seattle Public Schools Nutrition Services serves over 14,600 student lunches and 5,800 breakfasts each day, adheres to the highest level of national nutrition standards, and provides many locally sourced fruits, vegetables, and beans daily. Nutrition Services champions for the success of every student through advocating for the important connection between a healthy diet and learning.[2]

Vision for Nutrition Services

To provide student-centered nutrition services.[3]

The Student Dining Experience and Equity

The student dining experience is an important part of school for a variety of compelling reasons. School Board Policy 6705 says:

> *The Board recognizes that school meal programs help students develop good eating habits and understands and appreciates the kinds of food necessary to maintain good health. Children who eat nutritious meals and snacks are more likely to be healthy, perform better academically, and exhibit fewer behavioral challenges. School meal programs are a critical tool in closing opportunity gaps and in the fight against childhood hunger. In addition, mealtimes provide social interaction and a break from instruction that is important for the social-emotional health of students.*[4]

SPS middle schools operate with 2 or 3 lunches; all have 30-minute lunch periods. For schools with larger enrollments, it can be difficult for all students to get through the serving lines and still have adequate time to eat. Board Policy also states:

> *Meal periods will be long enough for students to eat and socialize. A minimum of 10 minutes will be provided to eat breakfast and 20 minutes to eat lunch, with additional time as needed for standing in line. Lunches will have sufficient passing time on one side or the other to allow students to get to or from the cafeteria. School leaders and food service staff shall place a high priority on reducing cafeteria line times to no more than 5 minutes for students.*[5]

Since retaining a consultant to review the district's Nutrition Services program in 2016, the District has been re-envisioning the full range of the student dining experience, from menu options to meal delivery methods to providing a variety of dining venues and seating arrangements. This work is critical to equity, as significant numbers of students who are eligible for Free & Reduced-Price meals are not participating in school meal programs. As noted in the study:

> *Looking specifically at the district's low-income students, one finds that there is a considerable gap between the number of students eligible for free or reduced-price meals and the number obtaining a lunch or breakfast from the district…On average only 62 percent of those eligible obtain a free/reduced price lunch meal; only 27 percent obtain a breakfast meal. On a daily basis more than 7,000 low-income students are not getting lunch; nearly 14,000 are not getting breakfast.*[6]

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[1] Barbara Coloroso, author of Kids Are Worth It! and Parenting Through Crisis. From website: http://kidsareworthit.com/
[2] SPS website > Departments > Nutrition Services, accessed December 2020.
[3] Middle School Ed Spec Meetings with Nutrition Services, September 29, 2020 & October 7th, 2020.
[4] Seattle School Board Policy 6705 Food Service and Student Nutrition, July 5, 2017.
[5] Ibid.
[6] Study of the Nutrition Services Department for Seattle Public Schools, April 2016, Prismatic Services, Inc., p. 34.

As further noted in the study:

> *Student participation in a district's meal programs, including National School Lunch and School Breakfast, are directly impacted by a variety of operational factors, including student access to food, food quality and variety, alternatives to the school meal, and cafeteria environment. As discussed in this report, SPS faces all of these challenges. As a result, student meal participation is generally poor. Improving student participation is a direct or indirect objective of most of the recommendations of this report.*[7]

Findings and Recommendations from the Nutrition Services Study

Several findings in the study were related to the quality and desirability of meal offerings, but for Ed Spec purposes we will focus on those that affect the design of middle school kitchens and dining areas. These include:[8]

- **Kitchen capacity and equipment in secondary kitchens is not being utilized to prepare popular food items onsite, decreasing customer satisfaction and meal participation.** The district secondary schools, with one exception, do not prepare entrée and side items onsite. Entrée items are primarily heat and serve convenience foods. Prior to building the central kitchen, secondary kitchens prepared items such as soups, sauces, pasta, mashed potatoes, and baked rolls onsite.

  Recommendation:

  - Resume onsite preparation in middle and high schools to optimize aroma, freshness, and flavor, while retaining some bulk preparation in the central kitchen.

- **At SPS secondary schools, serving line configurations, single Point-of-Sale (POS) stations, crowded dining rooms, and the anticipation of long wait times discourage participation.** Instead, students were observed bringing their own lunches at both middle and high schools. As a result, lunch participation among the district's free/reduced price eligible students is substantially worse than in peer districts.

  Recommendation:

  - Expand serving options to include grab-and-go carts and reimbursable meal vending machines in all secondary schools. Use of grab and go carts has been shown to increase meal access and participation, capturing customers in locations such as hallways, entries and exits, and common areas or student lounges. Another option is Washington's Smarter Lunchrooms Toolkit[9] suggests grab and go reimbursable meals can be available at a convenience line/speed window.
  - Middle schools should have at least two reimbursable vending machines, placed in the dining area.
  - Other modifications that could be made in a new facility include**:**
    - Provide multiple point-of-sale stations.
    - Configure serving lines to optimize student choice while retaining efficient movement through the line.
    - Provide adequate dining space for the number of lunches served.

- **In general, school cafeterias have inadequate line signage to encourage meal participation.** The district is not fully using the software it has. The primary method used to advertise the menu consists of paper copies of the menu taped to the serving line door or a handwritten notice on a board. For all students, the printout is too small to easily read while moving through the serving line.

  Recommendation:

[7] Ibid, p. 37.
[8] Study of the Nutrition Services Department for Seattle Public Schools, April 2016, Prismatic Services, Inc., various pages.
[9] Washington Smarter Lunchrooms Toolkit: Making the Healthy Choice the Easy Choice, OSPI Child Nutrition Services, www.k12.wa.us > Policy & Funding > Child Nutrition > School Meals > National School Lunch Program > Washington Smarter Lunchrooms, accessed December 2020.

- Improve cafeteria menu signage.
- In addition, Washington's Smarter Lunchrooms Toolkit[10] recommends:
  - A dedicated space or menu board within the servery or dining area that is readable from 5 feet away where students can see tomorrow's menu items.
  - Promoting the lunchroom and featured menu items in other areas of the school such as the main office, library, or gymnasium. Electronic displays could be utilized for this purpose.

Implementation of Study Recommendations

Subsequent to this study, Board policy was updated in 2017 to include support for new service models and other strategies designed to increase student participation and satisfaction:

> *District food service will include a variety of nutritious, appealing meals served in a safe, clean and hospitable environment. The food service menu will be developed and presented in a way that affirms and welcomes the cultural diversity of the District's student population. The Board encourages the use of high quality, organically and locally grown food and the* ***exploration of innovative service models*** *and business strategies, including Breakfast After the Bell and after-school meal options* ***that increase student participation and satisfaction*** *while maintaining the financial viability of the program.*[11]

In response to study recommendations, the Nutrition Services Director has identified the following changes to kitchen and servery facilities that are being pursued now or in the near future.[12]

- Schools will increase meal participation by providing better access to breakfast (breakfast in the classroom, grab-and-go breakfast), and developing supper programs, so kitchens will be in use for longer periods of each day.
- The central kitchen will be converted into a prep kitchen, with cooking and finishing happening at the individual school sites.
- The schools will need more variety of equipment to accommodate steaming, sautéing and baking. Specific items are included in Spatial Descriptions below.
- Additional menu options will be provided to appeal to a diverse student population; to allow up to three different serving lines will allow for multiple options.
- Increase the number of serving lines and point-of-sale stations so that more students can be served in the available time.
- Kitchens will also provide catering for special events, training, and have student engagement.
  - SPS is still developing the program for student engagement. This would include teaching healthy eating, food prep, and basic cooking. Project design teams should inquire during the site-specific Ed Specs process whether the student engagement program has any facility implications.
- All middle school kitchens should be outfitted similarly; no site-specific programs are anticipated.

Further, Nutrition Services supports changes to the design of student dining spaces. The Nutrition Services Director recommended:[13]

- Creating niches and/or booths for students to eat in where they feel safe and comfortable.
- Providing varying shapes, sizes and heights of dining tables to accommodate different group preferences.
- Providing some lounge-like furnishings near the commons where students can dine on a-la-carte items in a comfortable, casual setting.
- Providing a color scheme (and finishes) that are inviting and kid friendly.

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[10] Washington Smarter Lunchrooms Toolkit: Making the Healthy Choice the Easy Choice, OSPI Child Nutrition Services, www.k12.wa.us > Policy & Funding > Child Nutrition > School Meals > National School Lunch Program > Washington Smarter Lunchrooms, accessed December 2020.
[11] Seattle School Board Policy 6705 Food Service and Student Nutrition, July 5, 2017.
[12] Middle School Ed Spec Meetings with Nutrition Services, September 29, 2020 & October 7th, 2020.
[13] Middle School Ed Spec Meetings with Nutrition Services, September 29, 2020 & October 7th, 2020.

The design, functionality and character of the Dining Commons can have a large impact on a student's decision to participate in nutrition services programs. Many students are more comfortable eating in smaller, more private settings like a classroom or hallway niche than they are in a large, high volume, high noise common space. By designing a Dining Commons that offers a variety of ambiences, ranging from lively and spirited to quieter and more subdued, more students may find a place where they feel safe, comfortable and connected to their school community during mealtimes.

Additional recommendations for re-envisioning the student dining space come from two sources:

1. The Ass't Superintendent of Operations shared a similar Nutrition Services Study, conducted by the same consultant, for San Francisco Unified School District, an urban district of similar size with similar challenges. The consultant offered the following Design Guidelines for Dining Hall Configurations:

   The "mess hall look" is waning in most school districts across the United States. Instead, the following types of guidelines and philosophies have emerged:

   - Dining spaces should consist of a variety of ambiances, ranging from lively and spirited to subdued.
   - Massively large dining areas should be avoided in favor of smaller, zoned areas – students have only the breakfast and lunch periods to speak with their friends.
   - Seating for small groups should be provided and encouraged by using space dividers, acoustical baffles, and other means to create separate, smaller spaces and areas.
   - Use booths, cluster seating, and pedestal tables.
   - Lingering should be encouraged by providing opportunities for reading and card/board games.
   - Décor and seating should be rugged, colorful, and reflect school colors, themes, and insignia.
   - Lighting and acoustics should be designed purposefully and carefully to create a welcoming and attractive atmosphere for students.[14]

2. OSPI's Child Nutrition Services Program offers recommendations to increase student satisfaction and participation drawn from Washington's Smarter Lunchrooms Toolkit[15]:

   - Add more visual appeal to the lunchroom with colorful signage, murals, student artwork, etc.
   - Compost/recycling/tray return and garbage cans are at least 5 feet away from dining students.
   - Staff is encouraged to model healthful eating behaviors to students (i.e., dining in the lunchroom with them, encouraging students to try new foods, etc.)
   - The dining space is used for other learning activities beyond meal service.

Activities for Key Spaces

Kitchen

- Receiving and distribution of food and supplies
- Storage of food and supplies:
  - Dry storage
  - Refrigerator storage
  - Freezer storage
- Handwashing
- Food preparation for cooking
- Dry mixing for baking
- Cooking: steaming, sautéing, and baking; no frying.
- Dish and/or tray washing
- Pot washing

[14] Diagnostic Study of San Francisco Unified School District Student Nutrition Services, Prismatic Services, Inc, 2012, p. F16.
[15] Washington Smarter Lunchrooms Toolkit: Making the Healthy Choice the Easy Choice, OSPI Child Nutrition Services, www.k12.wa.us > Policy & Funding > Child Nutrition > School Meals > National School Lunch Program > Washington Smarter Lunchrooms, accessed December 2020.

- Food ordering and tracking
- Staff supervision
- Laundering linens
- Staff breaks.

Servery

- Serving up to three lines of customers, with point-of-sale stations
- May include hot carts, cold carts, grab-and-go stations.

Student Commons: Dining Mode

- Serving up to 500 students per lunch period for:
  - Dining
  - Connections and community building
- Staff supervision of student dining
- Dish & tray return
- Waste & recycling collection
- Alternative meal options including grab-and-go kiosks and reimbursable meal vending machines operated by SPS Nutrition Services (no other providers allowed)

Student Commons: Beyond Mealtimes

- Assemblies for individual or small group presentations, project work and large group instruction throughout the school day
- Student performances:
  - Band and orchestra
  - Choir
  - Dramatic performances
  - Spoken word presentations
- Accommodate student performance audiences of up to 600 adults
- After hours family & community gatherings and events

Community Kitchenette

- To support limited food warming and staging, not full meal preparation, for after-hours community gatherings.
- Also serve as teaching kitchen for Special Education and World Language Teaching Lab

Food Pantry

- Receipt and distribution of food
- Simple preparation and packaging of food, as well as packing into backpacks (See What Do We Do: Building School – Community Connections for additional information.)

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Commons						
Student Commons/Dining Area (includes thrust stage area beyond Proscenium)	2-3	Up to 500 for dining; 600 for audience	-	1	7,480	7,480
Vending machine/Grab & Go Niches, and Handwashing Stations, both just outside Commons but included in SF	-	-	-	1	included above	included in above
Kitchenette for Community Use & SpEd Life Skills	-	Up to 6	-	1	320	320
Pantry (for supporting Students & Families Experiencing Homelessness)	-	-	-	1	included in above	included in above
Stage	1	Up to 80	1	1	2,600	2,600
Performing Arts Storage	-	-	-	1	200	200
Dedicated restroom/changing rooms & makeup area	-	Up to 6	-	2	200	400
Kitchen						
Kitchen, includes receiving, food prep, scullery	-	-	-	1	1,100	1,100
Walk-in cooler	-	-	-	1	200	200
Walk-in freezer	-	-	-	1	200	200
Dry storage	-	-	-	1	350	350
Manager's office	1	-	-	1	140	140
Laundry/soap storage	-	-	-	1	70	70
Servery	Up to 3	-	-	1	800	800
Adult (kitchen staff) toilet/lockers	1	-	-	2	50	100
Required Subtotal			**1**			**13,960**

T.S. = Teaching Station

Spatial Descriptions

Kitchen

- Up to 4-5 staff members: two cashiers, two servers and one cook may be working at any given time, so special attention should be paid to functional work zones and circulation paths.
- Provide acoustics that mitigate the noise generated by equipment in a hard-surfaced room.
- If feasible, provide natural light near prep and cooking areas.
- Provide adequate floor area to receive and distribute up to 4 pallets of food and supplies to the various storage areas.
- All service doors interior and exterior to Kitchen should have threshold entrance ramps that meet ADA requirements of 1:12 slope.
- Doors entering kitchen from receiving area, and dry goods storage room to have 42" wide doors that stand open greater than 90 degrees.[16]
- Door swings for food service deliveries: it is preferred that the strike side of door is approached, particularly on walk-in refrigerator and freezer doors. This must be coordinated with preferences for food preparation in the kitchen.
- Storage of food and supplies:
  - Note that middle schools have higher quantities of dry and frozen foods than either high schools or elementary schools, as they are larger than elementary schools and students cannot go off campus for lunch as they do in high schools.
  - Quantities are dependent upon the demographics of the school. With higher quantities of students receiving free and reduced price lunch, the quantity of dry storage needed increases.
    - Dry storage area with utility shelving
    - Walk-in refrigerator (cooler)
      - With shelving.
      - Floor to be level with kitchen floor.
      - Doors on walk-in refrigerators to be at least 35" wide.
    - Walk-in freezer
      - With shelving
      - Floor to be level with kitchen floor.
      - Floor should be load-bearing for 2,500 lbs. of pallet and pallet jack.
      - Doors on walk-in freezers to be at least 35" wide.
- Handwashing sinks conveniently located for frequent use; locate one for convenient and direct access as staff returns from restroom.
- Food preparation area for up to 3 staff persons to work at the same time. Prep tables should be close to and facing the serving line.
- Dry mixing area near baking oven(s) for 1 staff person to work.
- Cooking: steaming, sautéing, and baking; no frying. Up to 2 staff persons to work at the same time.
  - Equipment to include:
    - Tilt skillet
    - 1 double-stack steamer (adjacent to tilt skillet)
    - 1 double combi-oven
    - 1 double convection oven.
- Dish/reusable tray return area connected to washing area with sanitizing dishwasher and adequate countertops both sides of dishwasher.
- Potwashing area with large sinks, floor drain
- Kitchen manager's office for food ordering and tracking, and staff supervision
- Laundry/soap storage:

[16] Notes regarding doors, floor levels, thresholds, etc, per Teamster 174 Specifications for Building Performance and Quality Improvement provided by Distribution Services Manager Rob Thomas (not dated).

  - Provide stacked washer/dryer and laundry storage rack within separate storage area directly adjacent to Kitchen.
  - Multiple loads of towels and aprons are washed each day.
  - To maintain sanitation standards, washer/dryer shall not be shared with others at school.
- Staff breaks: table and chair for up to 4-5 staff persons.
- Garbage removal and floor cleaning by Custodial, not Kitchen staff.
- No custodial closet within Kitchen; staff will use mop bucket inside Kitchen for spills.

Servery

- Student time in serving line needs to be less than 10 minutes.
- Serving up to three lines of student customers, with two point-of-sale stations.
- Provide at least (2) registers for double-sided lines.
- Registers always at the end of the serving line.
- Half of the serving line is typically open at breakfast.
- Warmers with glass doors.
- May include hot carts, cold carts, grab-and-go stations.
- Attractive and visible menu signage.

Student Commons: Dining Mode

- Serving up to 500 students per lunch period.
- Provide some café-style seating options to encourage a wide range of activities, from eating to studying to informal socialization.
- Provide handwashing stations adjacent to the commons near the point(s) of entry.
- Staff supervision of student dining.
- Dish & tray return.
- Waste & recycling collection separated from student dining tables.
- Acoustical treatments to dampen noise and create the type of dining experience that facilitates communication and builds community.
- If outdoor area adjacent to the commons is provided with sightlines for supervision from within commons, then provide attractive outdoor seating suitable for dining.

Student Commons: Beyond Mealtimes

1. Large Group Instruction/ Presentation Mode:
   - Assembly space for presentations, project work and large group instruction throughout the school day.
   - Use of convertible dining tables in either table or bench seating mode, depending on type of activity.
   - Equipped with appropriate audio/visual equipment, lighting and network access.
   - When feasible, provide a strong outdoor connection.
   - If tables other than convertible benches are used, then ample, accessible storage is critical so tables and chairs can be readily deployed or stowed as needed with minimal transition time.
   - Acoustical treatments to dampen noise of the kitchen and activities from adjacent hallways or other areas of the school.
2. Community Event Mode:
   - Use of convertible dining tables in either table or bench seating mode, depending on type of activity.
   - The District allows after-hours use of school kitchens for school-related functions, but since health department regulations must be upheld, groups must obtain and pay for a permit, which includes costs for both food procurement and staff labor for preparation and clean-up.[17]

[17] SPS Policy H65.01 Revised June 1984, "Food Services for School Functions." http://www.seattleschools.org/UserFiles/Servers/Server_543/File/Migration/Departments/HR/H65.01.pdf?sessionid=d249654e54f9ae0807a5cf8a160886eb

- Provide an adjacent community kitchenette, with a hand washing sink, a double sink, and a microwave to increase the flexibility of programming for after-hours use. Purpose is to support limited food warming and staging, not full meal preparation.
- Kitchenette can serve as teaching kitchen for Special Education provided it also has a range and full-size refrigerator.
- Kitchenette must be secured during school hours, with lockable doors or sliding grille.

3. Performance Mode:
   - Designed to accommodate music and other performances with adequate sightlines for an audience of up to 600 adults.
   - SPS FF&E Standards for middle schools illustrate how the space shall be configured to utilize the 3-in-1 cafeteria tables that convert to bench seating; dining benches can be supplemented with stacking chairs to reach the 600-adult target.
   - Additional chairs are anticipated to be stored in the Performing Arts Storage space, which must be a the same floor level as the commons.
   - The Commons should be configured such that, in performance mode, the space can be sufficiently enclosed to avoid distractions from passersby or other activities within the school.
   - Lighting
     - Lighting of the commons and adjacent spaces shall be zoned and provided with local controls such that there is no spillover into the performance space from those adjacent spaces.
     - House lighting should be able to adjust lighting levels so that all performances are adequately lit or visible on a screen.
     - Front of house lighting: provide 1 centered on the proscenium opening or 2 lighting pipes at 45 degrees to the proscenium, one per side.
   - Sound system – see below under Stage.
   - Speakers – Provide 1 center speaker cluster ceiling mounted or 2 speakers (left and right) mounted to wall.
   - Acoustical - Provide wall and ceiling acoustical treatments to enhance performances as recommended by the acoustical consultant.
   - Historic Landmark Structures: In the event that an existing middle school facility has been designated as a landmark by the City of Seattle and, as a result, the existing auditorium must be retained, then the activities and systems described for the student performance commons, the stage, the performing arts storage, dedicated restrooms/changing rooms, and makeup room, shall all be provided for within the existing auditorium areas.

<u>Stage</u>

1. Performance Mode
   - Provide configuration and amenities for a teaching station to provide program flexibility and to allow future development of a middle school drama program.
   - The stage shall be large enough to accommodate instrumental music and choral performances with layouts as shown in the FF&E Standards, and sized to have wings.
   - The stage shall be 36" above the commons floor level, and the proscenium opening shall be 38' wide x 16' high'.
   - The apron should thrust out from proscenium 3' (used for only when operable wall is open) - 7' (allows for a presentation when stage is closed.)
   - Stage floor and ceiling shall be black.
   - The interior walls shall be painted like other classrooms.
   - Stage curtains, equipment and lighting shall be per the Technical Building Standards.
   - Stage rigging shall be commensurate with stage lighting per site specific agreement.
   - Stage lighting
     - Provide 2-3 lighting pipes over the stage equally spaced apart.
     - Accommodate dramatic performances with simple LED stage lighting with pre-set configurations for up to 8 - 10 presentation and performance modes that students can operate.

    - Provide a simple-to-use and high-quality lighting system without need for an experienced lighting equipment operator.
- Audiovisual equipment
    - Provide mic outlet on stage right and stage left in apron.
    - Provide 3-5 microphones.
    - Rear projection screen
- Sound System
    - A sound system to amplify individual performers and presenters as well as small groups of performers on the stage, and to pick up music performances within the house.
    - Provide a simple-to-use system and high-quality sound without having to be an experienced sound equipment operator and offers great flexibility.
    - Speakers
- Operable partition wall
    - Provide area for stacking a minimum of 5' away from proscenium opening.
    - Select operable wall that does not interfere with the location of the front and valance curtains. Curtains should not be located more than 2' behind proscenium opening.
    - Operable partition walls to be acoustically sufficient to ensure that noise from the commons and/or the gym doesn't interfere with activities on the stage.

2. Classroom Mode
    - Accommodate up to 32 students at 2-person worktables and one teacher with a presentation station and a workstation.
    - The teaching wall to be located on the longest wall.
    - A teacher wardrobe cabinet should also be provided.

<u>Performing Arts Storage</u>

- Storage for grand piano and other performing arts equipment.
- Accommodate additional stacking chairs on carts for performance audiences.

<u>Makeup Room</u>

- Not a dressing room.
- Provide mirrors and makeup counters for all genders.

<u>Dedicated Restrooms:</u>

- Kitchen staff:
    - If toilet rooms for custodial staff are within reasonable proximity of the kitchen, then toilet rooms shared among custodial and kitchen staff are fine. Otherwise provide adult toilet rooms near the kitchen as well as the custodial/receiving area.
    - No shower is necessary for food service staff.
    - Most kitchen staff change clothes at work, so provide six half-size lockers either within the kitchen or within nearby adult toilet rooms.
- Student restrooms: adequate for supporting the number of students who will utilize the commons at one time. Provide toilet rooms with individual stalls sized to function as student changing rooms (for example, two all-gender toilet rooms with minimum 4 individual stalls each).
- Adult/community restrooms: adequate to support events without the need for adults to access other zones of the school after hours.

Adjacency Descriptions

The Commons should be prominently located and connected to primary circulation routes. When feasible, it should have a strong outdoor connection. It should offer a range of comfortable spaces where groups of students can congregate and include a robust wireless system that allows for the use of digital devices and strategically located power outlets to allow students to charge their devices. In addition to traditional serving lines and cash registers, Grab-and-Go kiosks and vending machines with dedicated point-of-sale capability should provide alternative meal options and encourage meal participation by reducing long wait times.

Dining Commons

- Located so that it is one of the premiere spaces in the school, and encourages eligible students to participate in school-provided meals.
- Direct connection to the servery
- Direct connection to outdoor seating
- Student and staff recycling process needs to be quick and efficient.
- See test diagrams at end of section.

Servery

- Directly adjacent to the Dining Commons, though must be able to be closed so that an appropriate environment for performances can be provided.
- Directly adjacent to the kitchen.

Vending/Grab-n-go

- Some A la Carte items may be integrated into the serving line.
- Provide grab & go kiosks and space for at least two Nutrition Services vending machines outside of the Commons but readily accessible, where use of these alternative meal options will not block the flow of student traffic.

Kitchen

- To facilitate frequent deliveries of food & supplies, it is strongly preferred that the kitchen be located on the same floor as, and if feasible, near the Central Receiving Area.
- Directly adjacent to the Servery.
- Near a staff toilet room.

Laundry/Soap Storage

- Within kitchen, but separated from food storage, prep, and cooking.

Staff Toilets

- Toilet Rooms should be across the hall from the Kitchen, not within. Can be shared with custodial staff if near Central Receiving/Custodial Workroom.

Stage

- Directly adjacent to both Dining/Commons and Gym so either Gym or Commons can serve for assemblies.

Performing Arts Storage

- Directly adjacent to the commons or stage or accessed by a shared hallway.
- Accommodate additional stacking chairs for performance audiences, performing arts items.

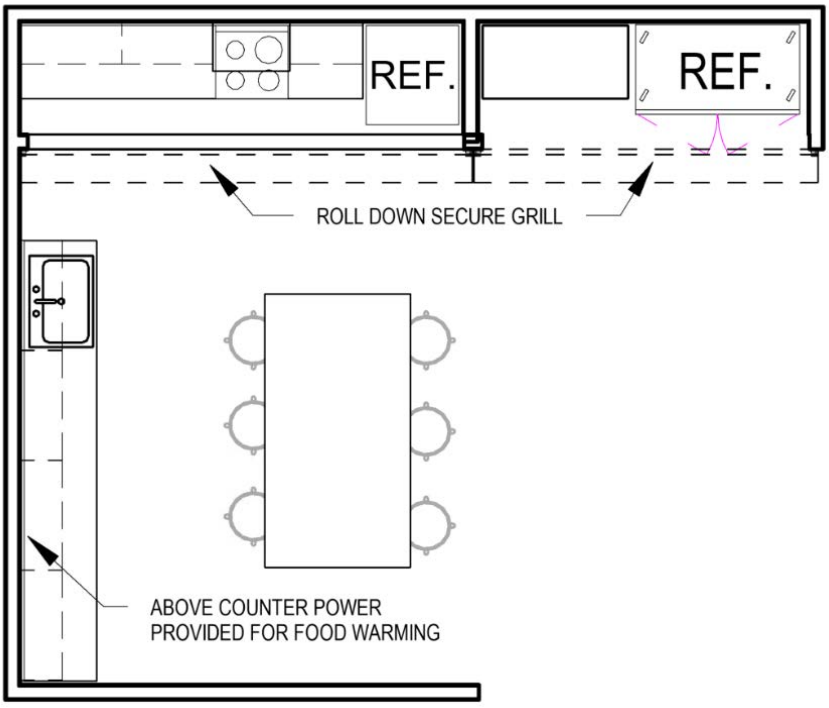
Community Kitchenette/Food Pantry

- Directly adjacent to the Dining Commons but located so that Special Education Classes and World Language Classes can access as a teaching kitchen.

Space Layouts

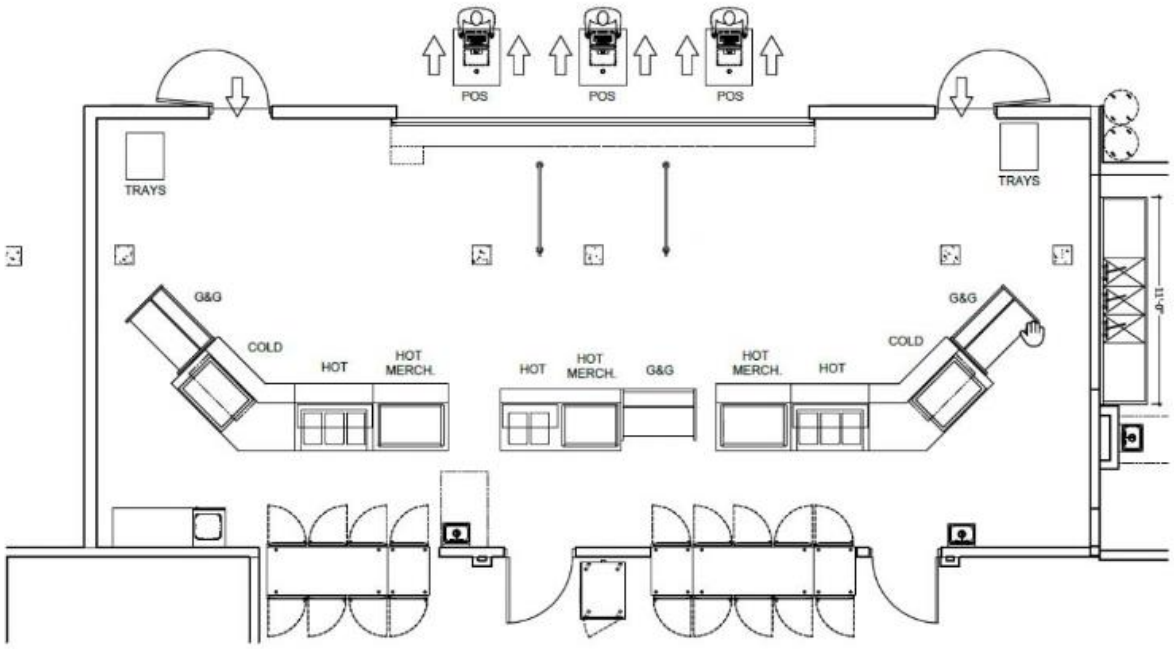
Community Kitchenette/Food Pantry

the layout below is intended to show the shared use of the space, dedicated equipment and storage, and securing areas when not in use.

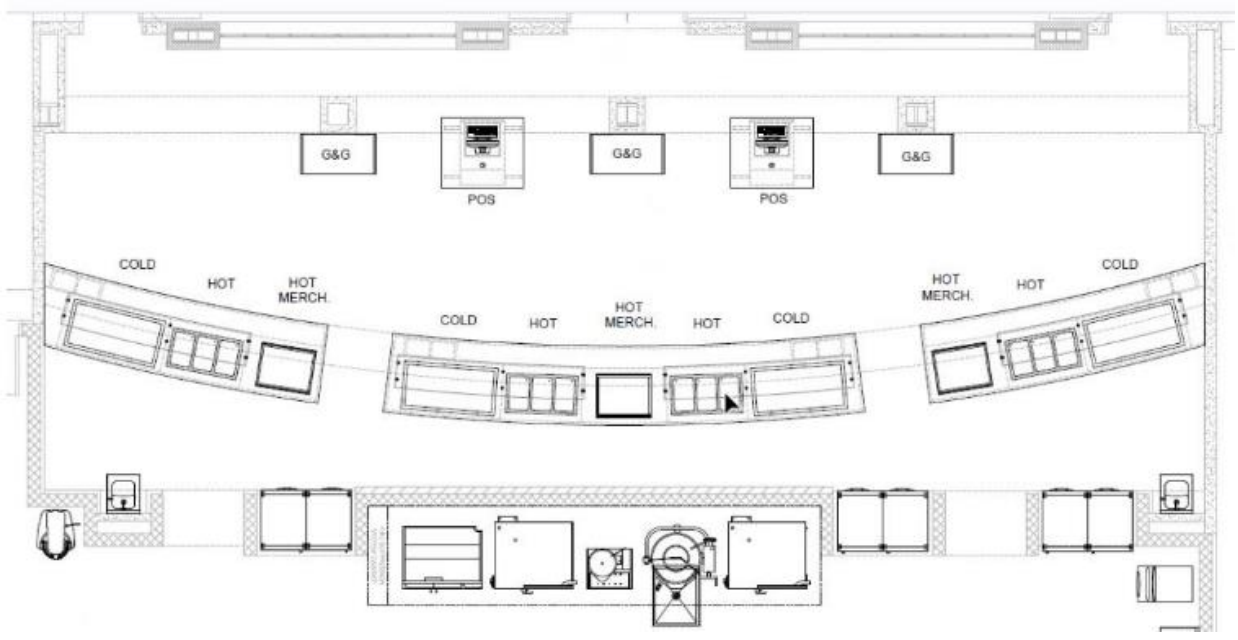


Servery

the layout below is intended to show the shared use of the space, dedicated equipment and storage.

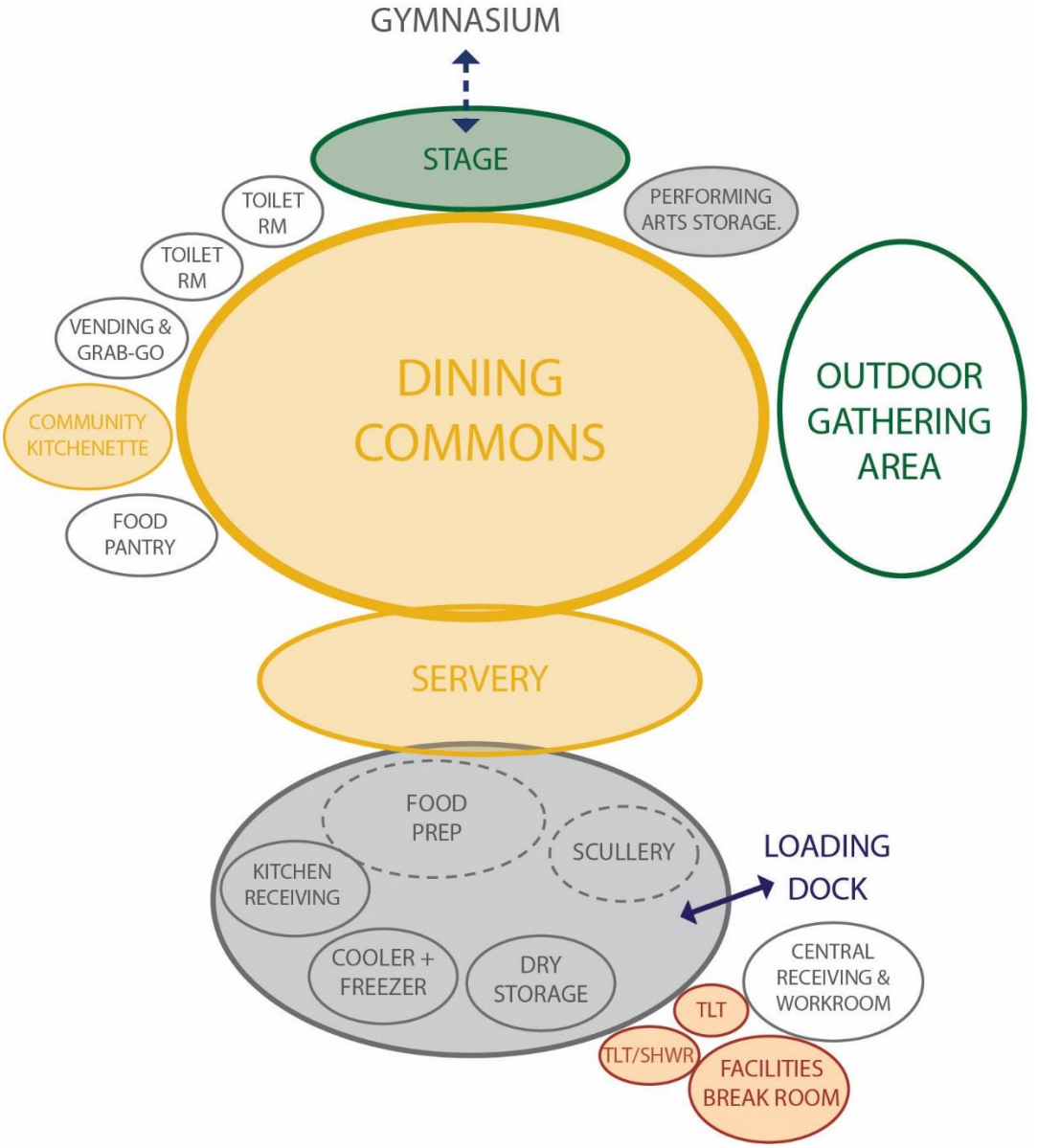


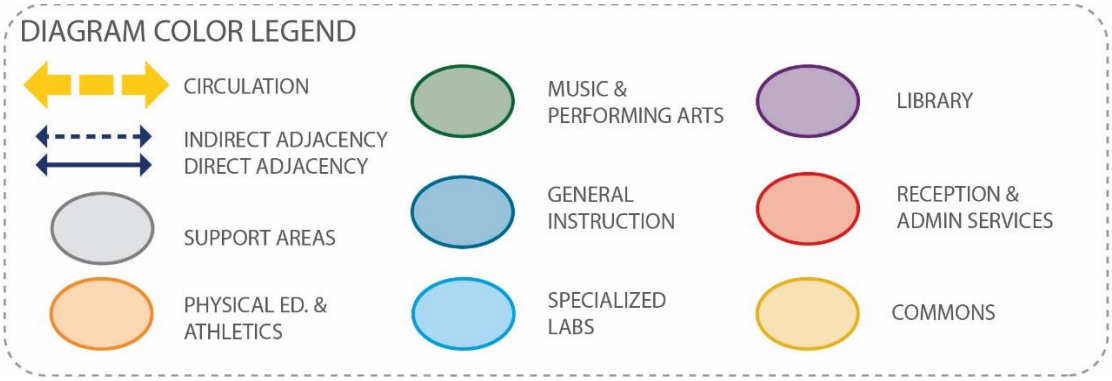
Option A



Option B

Adjacency Diagrams





Outdoor Classrooms and School Garden

"Nature restores us. All we need to become aware of its salutary effects is to step outside and take a deep breath, or pass from a crowded sidewalk into a verdant park. Some of the profoundest ways that nature affects us take place elsewhere, outside our conscious awareness, as our bodies and brains respond biologically, neurochemically to nature's cornucopia of offerings. We may know that a dearth of fresh air or a paucity of greenery or a scarcity of natural light degrades the moods of people vulnerable to depression. But such factoids misrepresent how pervasively nature's presence or absence influences people's cognitions and emotions."[1]

Outdoor Learning

Outdoor learning is an education strategy which goes beyond replicating classroom structures and approaches in the outdoors.

Green Schoolyards of America provides a working definition of the value of outdoor learnings spaces –

> *"living school grounds are richly layered outdoor environments that strengthen local ecological systems while providing place-based, hands-on learning resources for children and youth of all ages. They are child-centered places that foster empathy, exploration, adventure, and a wide range of play and social opportunities, while enhancing health and well-being and engaging the community.*[2]

Lessons can be learned from the experience of schools which have fully embraced outdoor learning as core to their curriculum and pedagogy. Researchers studying forest schools have found that outdoors, children hone their motor skills, engage in more creative play, have fewer conflicts, stay healthier, learn to be more independent and develop a compassion for nature and wildlife that is likely to last a lifetime.[3]

Evidence that supports the incorporation of outdoor learning as an integral part of every student's school day includes:[4]

- Children with symptoms of ADHD are better able to concentrate after contact with nature.
- Play in a diverse natural environment reduces or eliminates bullying.
- Nature helps children develop powers of observation and creativity and instills a sense of peace and being at one with the world.
- Early experiences with the natural world have been positively linked with the development of imagination and the sense of wonder.
- Wonder is an important motivator for lifelong learning.
- A decrease in children's time spent outdoors is contributing to an increase in myopia in developed countries.
- Outdoor environments are important to children's development of independence and autonomy.

Further studies show students may benefit in several important ways:[5]

- Students retain more after lessons in nature in biology and math, language arts, social studies and science more generally then lessons indoors.
- Exposure to trees, parkland, gardens, including physical activity, relieves stress and rejuvenates attention.
- Positive experience outdoors and in natural settings appears to play a key role in fostering environmental stewardship into adulthood.

Design of site based learning and outdoor classrooms should build from this research, and work to support many aspects of the learning activities outlined in previous sections.

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[1] Goldhagen, Sarah Williams, Welcome to Your World: How the Built Environment Shapes Our Lives, 2017, p. 136.
[2] Danks, "Green Schoolyards America, Living Schoolyard Activity Guide", 7
[3] Nair, "Outdoor Learning, Leave the Classroom Behind: Special Covid-19 Issue", 7
[4] Nair, "Outdoor Learning, Leave the Classroom Behind: Special Covid-19 Issue", 16
[5] Kuo, Do Lessons in Nature Boost Subsequent Classroom Engagement? Refueling Students in Flight", 2

Outdoor and Community Education[6]

At the beginning of the 2020-21 school year, the Seattle School Board adopted Resolution 2020/21-4, which calls for outdoor/community education pilots to begin that will inform the work of an Outdoor and Community Education Task Force. This is one solution for bringing back more students for in-person learning during remote instruction and provides an opportunity for personal connection that many SPS students asked for in a recent survey.

The task force will also make recommendations to support outdoor and community-based learning opportunities as a standard feature of education for all students in Seattle Public Schools.

Curriculum

Outdoor learning spaces are most effective when opportunities are provided to expand teaching and learning beyond the indoor environment within the context of the core curriculum focus of the school. Work with the SDAT to develop ways for the outdoor classroom to support the following models.

- Subject Centered – A model of curriculum that tends to focus on the subject. How can the outdoor classroom provide resources for subjects that cannot be provided for indoors? Can the design of the outdoor area and landscape provide specific examples of a subject(s) matter within the curriculum?
- Learner Centered – A model that revolves around student needs, interests, and goals. How can the outdoor classroom provide differentiated instructional opportunities and an opportunity to select assignments, teaching and learning experiences, or activities that are timely and relevant? I.e., Seasonal, time, orientation, patterns, etc.
- Problem Centered – A model that looks at a problem and formulates a solution. How can the outdoor classroom help students engage in problems for which indoor spaces are not conducive, and expose them to real-life issues and physical conditions which are transferable to the real world?
- Active and Field Study – A model that focuses on learning that engages kinetic activities or direct access to an environment to study. How can the outdoor classroom engage students' active participation and movement and/or as a base from which to explore and study the entire site?

Educational Strategies

Outdoor learning supports educational strategies beyond a direct correlation to a curriculum under study. Comprehensive site design, layout, movement, access, and landscape should be coordinated and collectively support the following:

- Health – Sensory Exploration, Physical Activity, Well-Being.
- Social and Emotional Growth – Empathy, Care for others and surroundings, Belonging and Purpose.
- Place Based Understanding – Cultural, Geographic, and Natural Context.
- Habitat and Ecology – Native flora and fauna. Connect to and reveal ecological systems.
- Community Engagement – Events, Stewardship, Joint Use

Related Programs

There are several program areas which present key opportunities for adjacencies and outdoor learning activities. Available site size and configuration will influence the ability to support all of these programs, so prioritization may be necessary. Reference the following sections for further information, adjacencies, and parameters:

- Library
- Art
- Physical Education and Activities
- Science
- CTE

[6] Seattle School Board adopted Resolution 2020/21-4

In addition, community use of facilities via a Joint Use Agreement with Seattle Dept. of Parks and Recreation should also be considered in development of outdoor learning space(s).

Outdoor Classrooms and Learning

In conjunction with overall site teaching and learning opportunities, provide designated outdoor classroom(s) as follows:

- A minimum of one accessible outdoor area that approx. 30 students can gather and engage with teachers and each other in an outdoor learning activity.
- A series of smaller scaled spaces that provide opportunities to explore, investigate, interact, and gather in smaller groups around educational themes and place-based environments.
- Outdoor area(s) with resources structured to support at minimum 2 related programs listed above. The selection of programs should be determined within the SDAT process.

Given the fact that the site and landscape design will support a wide range of curriculum, environmental, topographic and neighborhood level factors a strict prescribed approach is not feasible. The following are general goals within the context of outdoor classrooms and learning.

Activity & Spatial Descriptions

Design of the outdoor classroom should not attempt to replicate an interior classroom setting per se; rather, it should take advantage of the learning opportunities that are available in the outdoors.

Spatial Considerations

- Locate in area of site with ample access to daylight throughout the day.
- Use landscape to provide seasonal shade or access to some shaded areas.
- Provide at least one covered area when feasible. Building elements or overhang areas are effective ways to provide protected covered areas during relatively mild but rainy days common to the region. Care is to be taken to proportion the height and depth of these spaces, so they remain open, well-lit by daylight, and do not feel confined or cold, particularly during the winter months. Consider vibrant colors, daylight from multiple sides, adequate supplemental lighting, or other strategies so they remain vibrant, welcoming, and open.
- Locate in highly visible areas of the site to encourage use and provide adequate informal supervision of the space.

Ground Surfaces and Seating

- Ground surfaces are to be active learning surfaces. Utilize pavement patterns, colors, and surfaces in ways that encourage learning, movement, and exploration. Pavement joints and transitions are an opportunity to introduce patterns and geometry to support teaching and learning.
- Provide adequate area of hard scape surface for the space to be used in variable weather conditions.
- Uncovered areas are to be well draining to reduce or eliminate puddles even during light rains.
- Seat walls, benches or other surfaces intended for seating should be designed to shed water.

Overall Site Design and Learning

SPS Middle Schools are in a variety of environmental, geographic, and culturally rich neighborhoods. Outdoor learning is influenced by many factors both from the constructed and natural environment perspective. To best engage the opportunities present in outdoor learning approaches, consider the following.

Environment and Ecology

- What ecological systems and settings are present on or directly adjacent to the school that can support curriculum and outdoor learning if access is given or the ecology is preserved? (a woodland area, a daylit stream, wetlands)
- Solar access and prevailing winds both on the macro scale and micro-climates created near the building or significant site features.
- Seasonal patterns and change. During the school year daylight access, weather patterns, temperature can have effect on opportunities to engage in outdoor learning. Consider more than just protection from or mitigation of the patterns. What educational opportunities exist with given patterns (the planting of a grove of deciduous trees near science classrooms to support easy access to study photosynthesis, transpiration, and nutrient flows over the course of a seasonal growth cycle, for example)?

Resources and Access

- Proximity to other social and cultural resources that have outdoor learning opportunities or resources in place that can be considered through partnership or joint use. (P-Patches, park lands, libraries, farmers markets, etc)
- Location of building and site access points to outdoor learning spaces.
- Access control strategy that allows for access to an outdoor learning area but also effective return into the school in a safe and secure manner.

Design

- Make visible patterns and dynamics that exist and influence the experience of the site and place.
- Optimize Available Area. Middle Schools have many competing site activities that include highly regulated uses such as athletic fields on often limited and constrained urban sites. Outdoor learning can support many scales and approaches across the curriculum. Beyond open areas of the site, consider rooftop learning opportunities such as weather stations. Also consider building-adjacent or smaller scaled canopied areas with individual and group seating for activities such as reading, research, independent study, and team collaboration.
- Transition zones – walk-off mats; area to store coats, umbrellas, teaching tools and supplies.
- Materials and Elements
- Visibility and Access

School Gardens

School learning gardens are a recognized hands-on teaching tool to support a variety of disciplines such as Science, Environmental Education, Reading, Art, Language, Math, Health and Nutrition, Stewardship and more. The opportunities to implement lessons outdoors are endless.[7]

Design Considerations[8]

Location

- Garden to be located to avoid conflicts with maintaining and operating the school and grounds.
- Avoid placing school gardens at the front of the school, because school gardens sometimes tend to be untidy, which detracts from the community's first impression of the school.
- Visibility: Consider placing the garden in a highly visible place for all to enjoy (and to encourage good maintenance practices.)

[7] Seattle Public Schools, School Learning Gardens (Outdoor Classrooms) Draft
[8] Seattle Public Schools, School Learning Gardens (Outdoor Classrooms) Draft

- Sun: Direction and hours of sun or shade is of utmost importance for the type of garden you choose. For many garden types, you will want a sunny location, but preferably not too hot to avoid heavy water consumption (or sweltering gardeners).

Other Considerations

- Water and Irrigation:
  - A nearby source of water is imperative.
  - It is mandatory that the use of water in learning gardens follows resource conservation methods and is consistent with School Board Policy and Superintendent Procedures regarding water conservation.
  - A backflow device is required to prevent contamination with the domestic water system.
  - A small meter device at the hose bib or irrigation meter may be required for a new garden to measure water used. In this case, the school garden contact will be expected to report monthly the amount of water used.
- Safety and security: gardens should not create attractive-nuisance places to hide or congregate. Consider plant materials' and garden elements' sizes and shapes and locations.
- Pest control: It is required that no plant material (at maturity) or garden features be placed within two feet of the building walls to avoid habitats that foster rodent activity. Mulching along the building wall will keep weeds down and provide access around the garden.
- Exposure: The school garden should not be too exposed to wind.
- Fences, gates: Where feasible, a fence enclosure is desirable to provide a sense of ownership, containment of students working in the garden, security of the garden, and protection from playground activities. Fence material must be consistent with District's standards for chain link (may be black vinyl coated).
- Garden paths: plan for suitable material to avoid muddy paths, as well as accessibility to those using wheelchairs. Woodchips are often a good option; Engineered Wood Fiber (a specific type of wood chips) should be applied to some paths to be navigable by wheelchair users.
- Seating: It is a good idea to include some form of fixed seating to allow up to one classroom of students to be seated while an instructor engages students in a lesson.
- Compost bin: Include a two-bin compost system to manage a small amount of yard-waste generated from the garden to demonstrate composting and soil lessons.
- Other optional elements: weather station, rain gauge, worm bin.
- Signage:
  - A sign should be displayed, saying something to the effect, "Please respect our school's Learning Garden, created and being maintained by _____".
  - Provide signage: Absolutely NO FOOD WASTE is allowed in open compost systems.
- Tools storage: Request design standard and maximum size for garden sheds from SPS.

Health Services

Healthy Students are Better Learners[1]

Health-related factors such as hunger, physical and emotional abuse, and chronic illness can lead to poor school performance. Health-risk behaviors such as early sexual initiation, violence, and physical inactivity are consistently linked to poor grades and test scores and lower educational attainment.

In turn, academic success is an excellent indicator for the overall well-being of youth and a primary predictor and determinant of adult health outcomes. Leading national education organizations recognize the close relationship between health and education, as well as the need to foster health and well-being within the educational environment for all students.

Schools are the Right Place for a Healthy Start

Scientific reviews have documented that school health programs can have positive effects on educational outcomes, as well as health-risk behaviors and health outcomes. Similarly, programs that are primarily designed to improve academic performance are increasingly recognized as important public health interventions.

Schools play a critical role in promoting the health and safety of young people and helping them establish lifelong healthy behaviors. Research also has shown that school health programs can reduce the prevalence of health risk behaviors among young people and have a positive effect on academic performance.

Student Health Services[2]

Our Mission:

SPS Student Health Services Department commits its resources to increasing the number of students who are ready to learn, to supporting teachers in creating environments which sustain the learning readiness of students, and to assisting all students in maximizing their personal levels of physical, social, and emotional wellness.

Student Health Services provides a comprehensive program that encompasses prevention, early detection, and remediation of health problems by providing health services, health education, and a healthy environment.

The Department consists of a staff of certificated registered school nurses, RNs, LPNs, and other support staff. The nurse's role is to assure that students receive required screenings, are compliant with immunization laws, have required individual health plans (IHPs) in place, and that school staff are trained on the essential and individual needs of students with chronic health conditions. They support a positive safe school climate, assist the school team in disability accommodations, provide direct nursing care, delegate safe medication administration to school staff, and participate in school health education.

In middle and high schools, health services are provided by both school nurses as well as outside providers in school-based health centers. All students can access those services provided by school nurses, but families must provide written consent for their students to access some of the services from external providers.

School Based Health Centers (SBHC's)[3]

The City of Seattle invests in School-Based Health Centers (SBHC) to keep children who are not performing well academically healthy and in school. SBHCs are available at most Seattle public middle schools. They are operated by community health agencies and are typically staffed with coordinators, nurse practitioners, and mental health counselors.

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[1] Excerpts from Centers for Disease Control & Prevention website > Adolescent & School Health > Health & Academics, accessed November 2020.
[2] "School Nursing in Seattle Public Schools," SPS website > Departments > Health Services > More about the role of school nurse.
[3] From City of Seattle website, http://www.seattle.gov/education/health/school-based-health-centers.

SBHCs provide:

- Sports physicals
- Preventative health care
- Evaluation and treatment of common health problems
- Immunizations
- Individual and group therapy
- Counseling for depression, trauma, stress, and problem-solving

The Seattle & King County Public Health Department manages multi-year contracts with community health agencies through its Community & School-Based Partnerships program. Design teams should contact SPS Health Services for contacts for the current provider. King County's program coordinator should participate in all design reviews.

School-Based Health Center facilities shall be provided in all SPS middle schools for which capital levy funding is providing a new, replacement, or substantially modernized facility, unless otherwise instructed by Capital Planning.

Activities

General

- Health services from internal (SPS) as well as external providers are co-located and share a reception/waiting area in the Health Services suite.
- The reception/waiting area is staffed by the clinic coordinator, who spends part time at the reception workstation but also coordinates services and provides health education in other parts of the school.
- Students are checked in and wait for services with either the school nurse or the SBHC.

School Nurse's Area

- School Nurse provides required health screenings for students.
- School Nurse provides direct nursing care to students.
- School Nurse delegates safe medication administration to students.
- Students rest in cot area.

School Based Health Center (SBHC)

- The community health agency's health care provider/nurse practitioner sees students in the exam room(s).
- In the lab, point-of-care testing (such as blood and pregnancy testing) is conducted.
- The Shared Office provides space for itinerant service providers such as Drug & Alcohol specialists, dieticians, and others. Students will be seen in this space.
- Mental health services are also provided.
- Dental services are provided several times per year, utilizing a portable dental chair.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Waiting/Reception (shared)	1	Up to 4	-	1	220	220
School Nurse (District provider)						
School Nurse Office & Treatment Room	1	1	-	1	180	180
Cot Room (2 cots)	-	Up to 2	-	1	120	120
Toilet Room w/ shower, washer & dryer	1	-	-	1	120	120
School Based Health Center (Outside Provider)						
Health Care Provider Office / Conference Rm	1	1	-	1	120	120
Mental Health Counselor Office	1	1	-	1	120	120
Counseling Conference Room	1	up to 6	-	1	150	150
Itinerant/Shared Provider Office	Up to 2	-	-	1	120	120
Exam Room	1	1	-	1	100	100
Lab	-	-	-	1	150	150
Toilet Room	-	1	-	1	50	50
Required Subtotal			**0**			**1,450**

Optional Spaces, when feasible:

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Additional Exam Room	1	1	-	1	100	100
Optional Subtotal			**0**			**100**

T.S. = Teaching Station

Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities.

Spatial Descriptions

Health services from internal (SPS) as well as external providers are co-located and share a reception/waiting area in the Health Services suite.

Reception / Waiting Room

- A full office workstation with reception counter, worksurface, a small countertop printer/copier, and files is needed at this location.
- A waiting area for up to 4 students should be provided, though it does not need to be generous because there is typically very little waiting time.
- Colors, finishes, furnishings and graphics should be provided with the goal that the entire health services suite be warm and welcoming rather than institutional.

School Nurse's Area

School Nurse's Office and Treatment

- Preferred that the school nurse's office and treatment area are combined in one space.
- Provide adequate storage for both office and medical supplies, equivalent to a full height cabinet 3' wide x 2' deep.

Cot Room

- Quiet space where students can rest.
- To allow for gender separation for students who need to rest, there should be a third cot in the Office/Treatment Room to provide an alternative. (In the past, when two separate cot rooms have been provided, the second one gets used for storage.)
- Access to natural daylight is strongly preferred to support staff retention; high windows that bring in light without compromising privacy are preferred.

Toilet Room

- Since toileting is not a nursing responsibility, no changing table should be provided in this space. If necessary, changing shall occur in the dedicated toilet room adjacent to the Intensive Services Special Education classroom(s).
- Provide commercial/sanitizing washer, and dryer.

School Based Health Center (SBHC)

Exam Room

- Provide base and upper cabinets, with a small sink in the base cabinets.
- Acoustical separation sufficient to maintain student privacy.

Lab

- Provide a pass-thru window to allow specimens to be transferred from the exam room(s) into the lab.
- Long wall of base and upper cabinets, with a sink in the base cabinets.
- All other furniture and equipment by provider contracted with King County.

Counselor's Office

- All furniture and equipment by provider contracted with King County.

Conference Room

- All furniture and equipment by provider contracted with King County.

Adjacency Descriptions

General

Due to the need for confidentiality, the Health Services suite must have an entrance and waiting area that are acoustically separated from other areas of the school. It is desirable that students who wish to obtain services may do so discreetly. Student privacy should be maintained, i.e., sightlines from common hallways should preclude views into areas where students are resting or where services are being provided.

To protect student privacy, King County would prefer that students who enter the health services center are not visible by school staff; they prefer that the SBHC not be in direct proximity to the school administration area. However, this preference is in tension with the fact that school administrators are responsible for supervision of all students on campus, even when they are in the health center. It was therefore decided that there must be a visual connection between the school office/reception area and the cot room so that any students who are resting there can be supervised when the school nurse is unable to be present.[4]

School-based health centers currently serve students who attend the school in which they are located, as well as other SPS students from the surrounding area whose home school does not have a SBHC. Students from other schools should enter and be checked in at the main office before proceeding to the SBHC.

At some point in the future, if funding for services is expanded to include family and community members, then it is foreseeable that after-hours access may be needed. The Health Services suite should be configured to be separately secured from other areas of the school so it can be operated independently after hours. It is noted that King County would like a separate exterior entrance for after-hours access, but each additional entrance compromises school security, so it was concluded that all access to the Health Services suite must be thru the school's secure vestibule. For after-hours access, cell phones can be utilized by SBHC staff to meet and greet clients at entry vestibule, as they are currently doing during the pandemic.

For future reference, it was also noted that providing access to non-students changes the code occupancy classification from Education to Business for this portion of the facility and may consequently reduce flexibility of use.

It is preferred that there is clear separation between the school nurse's area and the SBHC, i.e., while the areas can share a common hallway, there should be no circulation through one of the areas to get to the other.

Waiting/Reception/Clinic Coordinator

- Directly adjacent to both School Nurse and SBHC areas.

School Nurse's Area

Nurse's Office & Treatment Room

- Within space or directly adjacent to school nurse storage

Cot Room(s)

- Direct sightline from Nurse's Office and Treatment Room, also from adult workstation in Health Services Reception area to supervise any students who are resting there when the school nurse is unable to be present.
- As of 2021, all middle schools fund full-time nurses, so direct sightline from the Admin Secretary into the cot room is not needed.

Toilet Room w/ shower, washer & dryer

- Directly adjacent to the treatment room,
- Accessed via a common hallway rather than directly through the treatment room since students who need the shower must be able to access the restroom.

[4] Ed Specs Meeting with Health Services Managers: Samara Hoag and Lynne Oliphant, December 1, 2020

School Based Health Center

Nurse Practitioner/Provider's Office

- Directly adjacent to an exam room.

Exam Room

- Direct adjacency via pass-through window to Lab so specimens can be transferred securely.

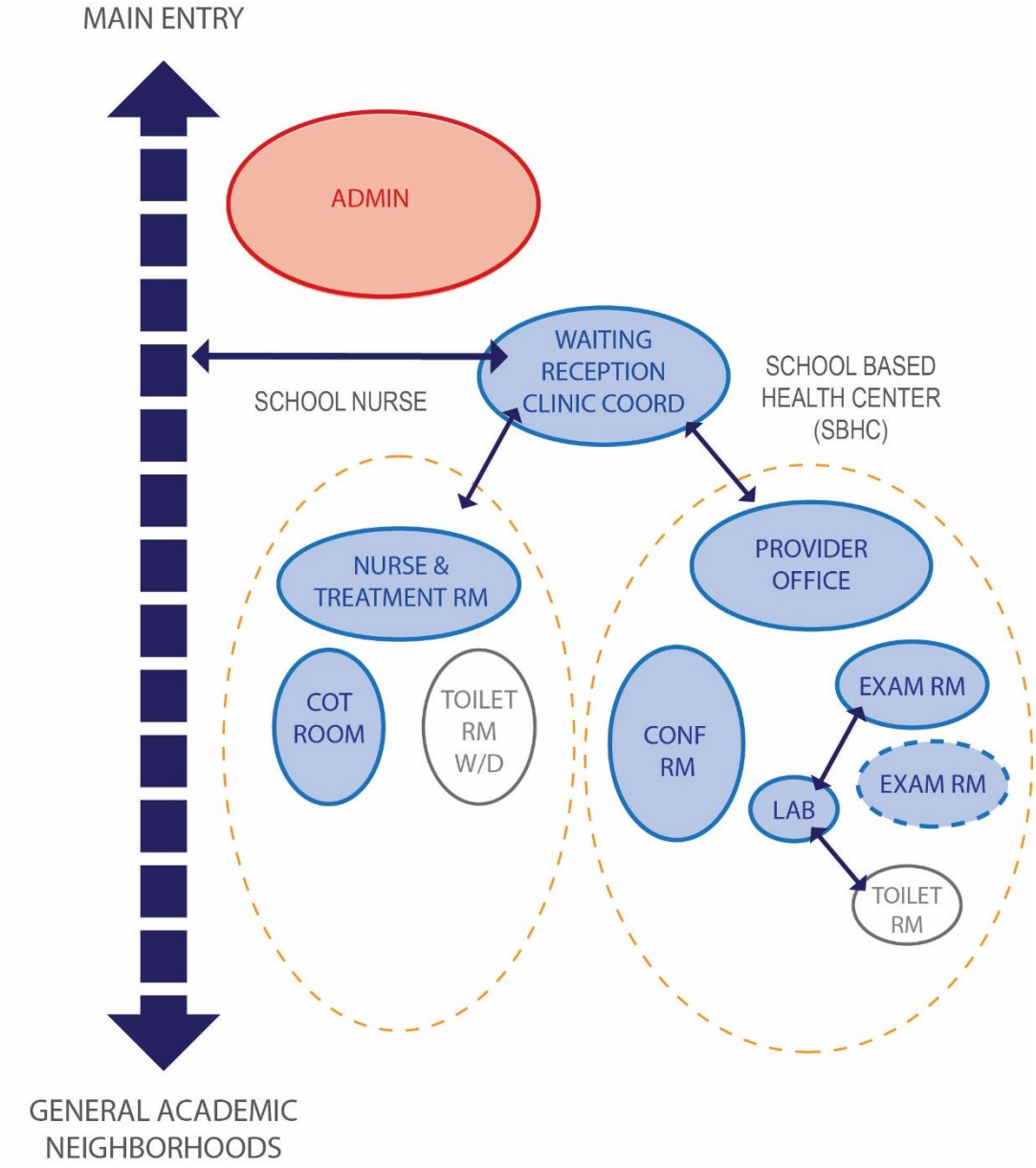
Restroom

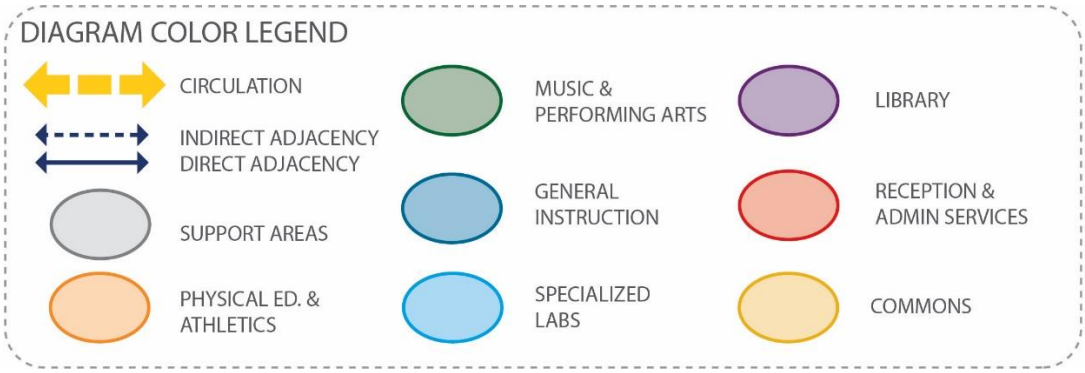
- Adjacent to Exam Room

Optional Conference Room

- Can be reconfigured to provide dental exams.

Adjacency Diagram





Administration and Counseling Services

"**Leadership and learning are indispensable to each other**" - John F Kennedy[1]

Administration Overview

The Administration area serves as the public face of the school, providing the first point of contact with visitors. It is the welcome center where students, staff and community can access information and services, so it should provide a clear sense of orientation and wayfinding within the school. Along with the main entry areas, it should include expressions of the vision and values of the school community. Evidence of school pride, culture and history should be on display and notable achievements of students and staff should be featured.

It is also a home base for the school's core leadership. It should project a tone of respect and academic professionalism, as it is the headquarters for coordinating and monitoring educational programs and addressing daily operations of the school.

The role of Administrators has been changing; it is expected they spend substantial time engaged in building relationships with students, staff, parents, and other service partners, so they spend less time in their offices. Therefore, it is recommended that some of the administrative and counseling offices be distributed within General Education classrooms areas to support relationship-building between students and school leadership. This intentional placement of adult leadership among students also increases the amount of passive supervision throughout the school, which contributes to an overall climate of safety and security. It promotes proactive rather than reactive interactions with students where adults can meet students "on their terms" in hallways or common areas rather than in formal office spaces.

Weighted Staffing Standard for 1000-Student Middle Schools[2]

The staffing standard determines the staffing for schools based on enrollment. As of the 2019-20 school year, for which information is available at the time of this writing, the standard for administrative staffing for a 1,000-student middle school would be:

Middle School Core Staffing Using Student AAFTE*	**# Staff**
Principal	1.0
Administrative Secretary	1.0
Assistant Secretary	1.0
Attendance Specialist	1.0
Data Registrar	1.0
House Administrator	1.0
MS Counselor, at a ratio of 375:1	3.0
Certificated Core Staff	0.5
Assistant Principals: allocated based on certificated teacher FTE. Estimated FTE for 1,000 student MS > 61	3.0

*AAFTE: Average Annual Full Time Equivalent

[1] Trade Mart Speech (Kennedy's Last Speech); November 22, 1963.
[2] 2019-20 Weighted Staffing Standard Model (revised 4/30/19 with Restorations to Model) As of recommended budget.

The number of office spaces identified in the Program Area Summary below has been allocated based on this staffing standard for district-funded positions. Individual schools may choose to fund additional positions from their school budgets; during the development of Site-Specific Ed Specs, design teams should confirm if there are permanent staff positions that cannot be accommodated within the total number of allocated offices.

Activities for Administration Areas

- Greets and screens visitors to the school.
- Serves as the central connection between the school and the greater community.
- Also serves as the communications hub among administrators, staff, and students, so staff here are engaged in a great deal of interpersonal interaction with everyone in the school community.
- Provides office work areas for administrators, administrative support staff, and other classified staff.
- Provides computerized school-based management system for student registration, attendance, budgeting, enrollment data, and all required forms and information.
- Provides registration space for development and maintenance of student class schedules, records, enrollment data, etc.
- Provides space for tracking student attendance.
- Provides centralized mail distribution to all school staff.
- Provides centralized administrative support space and features (copiers, printers, supplies, records storage) for administrative staff.
- Provides areas for conferencing of administrators with students, parents, staff, and community.
- Serves as the command center in the event of emergencies.

School Counseling & Guidance[3]

Mission Statement

Seattle Public Schools counseling program provides comprehensive developmental counseling services that address the academic, career and social/emotional development of all students. School counselors facilitate support systems to ensure that all students have access to and are prepared with the knowledge and skills necessary for college, careers and post-secondary life choices.

Guidance & Counseling Beliefs

The Seattle Public School Counselors believe a Comprehensive Guidance and Counseling Program will:

- Keep the development of the whole child at the forefront, stemming from the belief that social/emotional development is of equal importance to academic development and therefore should be given equal priority.
- Be comprehensive in design and systematically delivered to all students by full-time ESA Certified Professional School Counselors who have formal training in mental health and education, and who are uniquely prepared to meet the academic, social/emotional and career development needs of students.
- Benefit all students (including all racial, ethnic, and cultural backgrounds, sexual orientations, gender differences, academic abilities, and special needs).

Curriculum

The purpose of the Seattle Public School Guidance and Counseling Curriculum is:

- to provide students with knowledge of normal growth and development,
- to promote positive personal growth, and
- to assist them to acquire and use skills necessary for fulfillment in their many life roles.

[3] SPS website > Academics > School Counseling and Guidance, accessed January 2021.
This and the following section on Program Delivery excerpted and adapted from SPS Superintendent Procedure 2140SP Guidance, Counseling & Support Services, December 14, 2011.

The Seattle Public Schools Comprehensive Guidance and Counseling Program includes a series of structured experiences that are presented to all students in a systematic and sequential manner. The curriculum is organized around three major developmental domains:

- knowledge of self and others;
- educational development; and
- career planning and exploration.

While the counselors organize the counseling curriculum, other staff participate in its implementation.

Activities for Counseling Areas[4]

- Plan, organize and deliver a comprehensive school guidance and counseling program that personalizes education, and supports, promotes, and enhances the academic, personal, social and career development of all students, based on the national standards for school counseling programs of the American School Counselor Associations.[5]
- Deliver the curriculum component through large and small group presentations.
- Coordinate activities that help students plan, monitor, and manage their own learning.
- Work with students to analyze and evaluate their abilities, interests, skills, and achievement.
- Coordinate activities designed to help students establish personal goals and develop future plans.
- Conduct small group activities that may include families and other school staff, and be delivered either in or out of the classroom.
- Respond to students' personal concerns or relationship difficulties in the form of individual counseling, small group counseling, classroom counseling programs, and/or crisis counseling.

[4]Activities adapted from SPS Superintendent Procedure 2140ST, Guidance, Counseling & Support Services, 12/14/11.
[5] Collective Bargaining Agreement between Seattle Public Schools and Seattle Education Association, Certificated Non-Supervisory Employees, 2019-22, p. 101.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Administration - Centralized						
Public Reception & Waiting	-	Up to 6	-	1	500	500
Office Manager/Secretary/Support	Up to 3	-	-	1	200	200
Office Type 2MS: Attendance Office	1	-	-	1	150	150
Office Type 2MS: Registrar Office	1	-	-	1	150	150
Office Type 1MS: Principal, Ass't Principal or House Administrator	1	-	-	2	180	360
Office Type 4MS or 5MS: Shared Office (single occupant)	1	-	-	1	120	120
Office Type 6MS: Shared (Itinerant) Offices (double occupant)	2		-	1	120	120
Asst. Principal / House Administrator Waiting / Supervision Area	-	2	-	1	30	30
Conference Room, Medium	Up to 8	-	-	1	180	180
Administration Workroom Includes: Copy, Mail, Kitchenette	Up to 3	-	-	1	220	220
Records/Secure Storage	-	-	-	1	180	180
Closet/General Admin Storage	-	-	-	1	120	120
Patrol Closet	-	-	-	1	50	50
Staff Toilets	-	-	-	2	50	100
Admin/Counseling Services - Distributed						
Waiting/Supervision Area	-	2	0	3	30	90
Asst Principal or House Administrator	1	2	-	3	150	450
Office Type 2MS: Counselor Office	1	2	-	3	150	450
Conference Room, Small	Up to 6	-	-	3	120	360
Meditation Room	-	3 - 4	-	2	80	160
Distributed Resources						
Office Type 4MS or 5MS: Shared (Itinerant) Office (single occupant)	1	-	-	2	120	240
Office Type 5MS: Shared (Itinerant) Offices (double occupant)	2	-	-	2	120	240
Office Type 3MS: Security Office	Up to 2	-	-	1	150	150
Distributed Resources - General Access						
Staff Lounge	Up to 30	-	-	1	900	900
Staff Workrooms	Up to 3	-	-	3	180	540
Combined Total			**0**			**6,060**

T.S. = Teaching Station

Refer to SPS FFE Standards Space Types for Middle Schools for layouts and furniture, fixtures & equipment to be accommodated within primary spaces.

Spatial Descriptions

Administrative Spaces Organized to Enhance Relationships

Reception and Main Office Areas

The front office staff plays a significant role in projecting the culture and values of the school. Provide an open office floor plan in which the office manager and assistant's workstations are oriented towards the reception area, so they can ensure visitors receive personalized greetings while still performing their workplace tasks. The main office suite should be sufficiently transparent to allow for supervision of the main entry and student drop off areas.

Distributed Administrative & Itinerant Offices

Student-adult relationships benefit when administrators can be out among students. By breaking up the traditionally centralized administrative block and distributing some of the adult offices into the student academic areas, staff will be able to meet kids where they are. By breaking down barriers of space, we can help reduce barriers to relationships.

Main entry vestibule:

- Provides a secure entrance.
- Provides shelter while people are waiting for pickup.

Reception/waiting area:

- Should be a warm and inviting place that gives visitors and students a sense of calmness and professionalism.
- Should have direct sightlines for monitoring the main entry.
- Provide space for casual seating for up to 6 guests, as well as display of informational brochures and student work.

Secretarial area:

- An open office configuration should be utilized, with workstations configured so that all members of the office team face visitors when they enter, and any of them can greet whomever has arrived.
- Provide bi-level reception counter that provides an accessible height worksurface as well as a transaction counter.
- Provide space for two staff workstations in addition to reception space at counter.
- Reception counter may be built-in, but workstations should be modular and mobile.
- While administrative office staff are engaged in a great deal of interpersonal interaction with everyone, they are also involved in record keeping and accounting; workspaces should allow them to perform essential office and administrative work in conjunction with their reception and welcoming duties.

Attendance secretary's office - Office Type 2MS*[6]:

- Accommodate a workstation as well as small conference table and seating for up to 2 guests.
- Provide a transaction window with service counter to the main corridor.

Registrar's office - Office Type 2MS*:

- Accommodate a workstation as well as small conference table and seating for up to 2 guests.

Principal and Assistant Principal Offices - Office Type 1MS*:

- Accommodate a workstation as well as small conference table and seating for up to 3 guests.

Shared office - single occupant - Office Type 4MS* or 5MS*:

- Accommodate a workstation as well as seating for up to 2 guests.

[6] *See SPS FFE Space Standards for office type designations (i.e. 1MS, 2MS, etc.)

Shared office - double occupant - Office Type 6MS*:

- Accommodate 2 small workstations, each with undercounter file pedestal and freestanding bookcase.

Security office (Office Type 3MS*):

- Accommodate a workstation as well as small conference table and seating for up to 2 guests.
- Location of security camera monitors.

Administrative Conference Room:

- Accommodate seating for up to 10, with modular and mobile tables that allow for reconfiguration.

Assistant Principal's Waiting/Supervision Area:

- Accommodate 2 single desks and chairs for students to utilize while waiting or under supervision.

Administrative Workroom/Kitchenette & Mail Area:

- Provide a counter and table workspace for collating and assembly of documents.
- Provide built-in casework for supplies storage.
- Accommodate a large networked printer/copier for use by administrative staff (coordinate with SPS Printing Services).
- Provide a kitchenette for use by administrative staff; include sink, undercounter refrigerator, microwave.
- Provide mailboxes sufficient for all certificated and classified staff (assume 100 but confirm with specific school).
- Mailboxes shall be accessible from within workroom for mail distribution, and from adjacent hallway for mail pickup.
- Provide two entries, or semi-open plan for efficient flow.

Administrative Storage Room:

- Accommodate full height shelving on three sides.
- Provide either built-in or modular/mobile storage, as indicated in Type 1 & 2 layouts in the FFE Standard Space Types.

Records Room:

- Accommodate full height shelving as well as vertical file cabinets as shown in FFE Standard Space Types.

Distributed Workroom/Break Area:

- Provide layout workspace, supplies storage.
- Accommodate a large networked printer/copier for use by teaching & support staff (specific requirements to be coordinated with SPS Printing Services)
- Provide a kitchenette for use by teaching & support staff; include sink and microwave.

Staff Lounge:

- Provide a variety of table and seating options, as shown in FFE Standard Space Types for middle schools.
- Provide a kitchenette including double sink, dishwasher, two full-size refrigerators, full size range, two microwaves, built-in supplies storage.

Parent/Volunteer Storage:

- Provide space for storing materials and supplies.

Counselors offices - Office Type 2MS:

- Accommodate a workstation as well as small conference table and seating for up to 2 guests.

Conference Room, Small:

- Accommodate table and seating for up to 6 to support small group facilitation.

Meditation Rooms

- Provide sufficient transparency for supervision, but also some privacy.
- Provide a storage cabinet with cubbies.

Adjacency Descriptions

Locate administrative offices, specifically the reception area and the principal's office, with clear sight lines to the parking lots and building main entry for proper supervision. The main entry sequence should direct visitors through a secure vestibule, then into the reception area before they can proceed into the school. It should be possible to quickly and effectively lock down the main office to ensure the safety of the office staff and to establish an emergency communications and command post.

While some members of the core leadership team will be based in the main Administration area, others should be out among the students. Distribute interchangeable Administrative offices, paired with a small waiting area, a counseling office and a small conference room, and located within each grade-level grouping of teaching stations. This creates opportunities for enhanced adult-student interactions and increases supervision throughout the school.

Centralized Administration

Main Entry Vestibule

- Direct connection to the main office
- Ensure secondary entries have signage to direct visitors to the main entry.

Reception/Waiting Area

- Provide sightlines to the front of the building & main student areas.
- Provide a counter-height gate to separate the public reception zone from the office manager area and from access to the administrative offices.

Office Manager/Secretary

- Provide generous field-of-view into entry vestibule.

Attendance Office

- Locate on the main hallway directly inside the secure vestibule so that students may check-in without entering the main office/reception area.
- Transaction window shall be located to open directly to main corridor.

Registrar

- Locate in central administration area, unless school selects site-specific option to co-locate with Counseling.

Principal

- Direct connection to Waiting/Reception.
- Direct sightline to office manager/secretary's workstation.
- Visual connection to Main Entry/exterior bus drop off area

Assistant Principal or House Administrator Office, Centralized

- Visual connection to main entry/exterior drop off areas
- Student waiting area outside.

Administrative Conference Room

- Close proximity to Principal's office within main office suite

Shared Offices, Centralized

- Locate in main office suite.

Administrative Workroom

- Prefer visual connection to Office Manager/Secretary
- Mailboxes shall be located so that teaching staff may pick up mail without disruption to administrative work.

Records Room

- Locate within central administrative suite, within reasonable distance of secretary/office manager work area.

Distributed Administration

Assistant Principal or House Administrator Office, Distributed

- Locate with Counseling Office and small conference room.
- Student waiting area outside.

Counselor Office, Distributed

- Locate in small suite with Assistant Principal/House Administrator Office and small conference room.

Conference Room, Distributed, Small

- Directly adjacent to Counselor office and/or Assistant Principal Office within suite of Distributed Admin and Counseling offices.

Shared Offices, Distributed

- Locate in small suite with Assistant Principal/House Administrator Office and small conference room, or if preferred, distributed where student services are most needed.

Security Office

- Locate near the Dining Commons, with entry placed so that people may enter and leave this office discreetly.
- Direct physical & visual connection to Secondary Entrance

Staff Lounge

- Locate where staff will have some visual and acoustical privacy.

Distributed Staff Workroom/Break Area

- Distribute for convenient access among teaching staff.
- Proximity to staff toilet rooms is preferred.

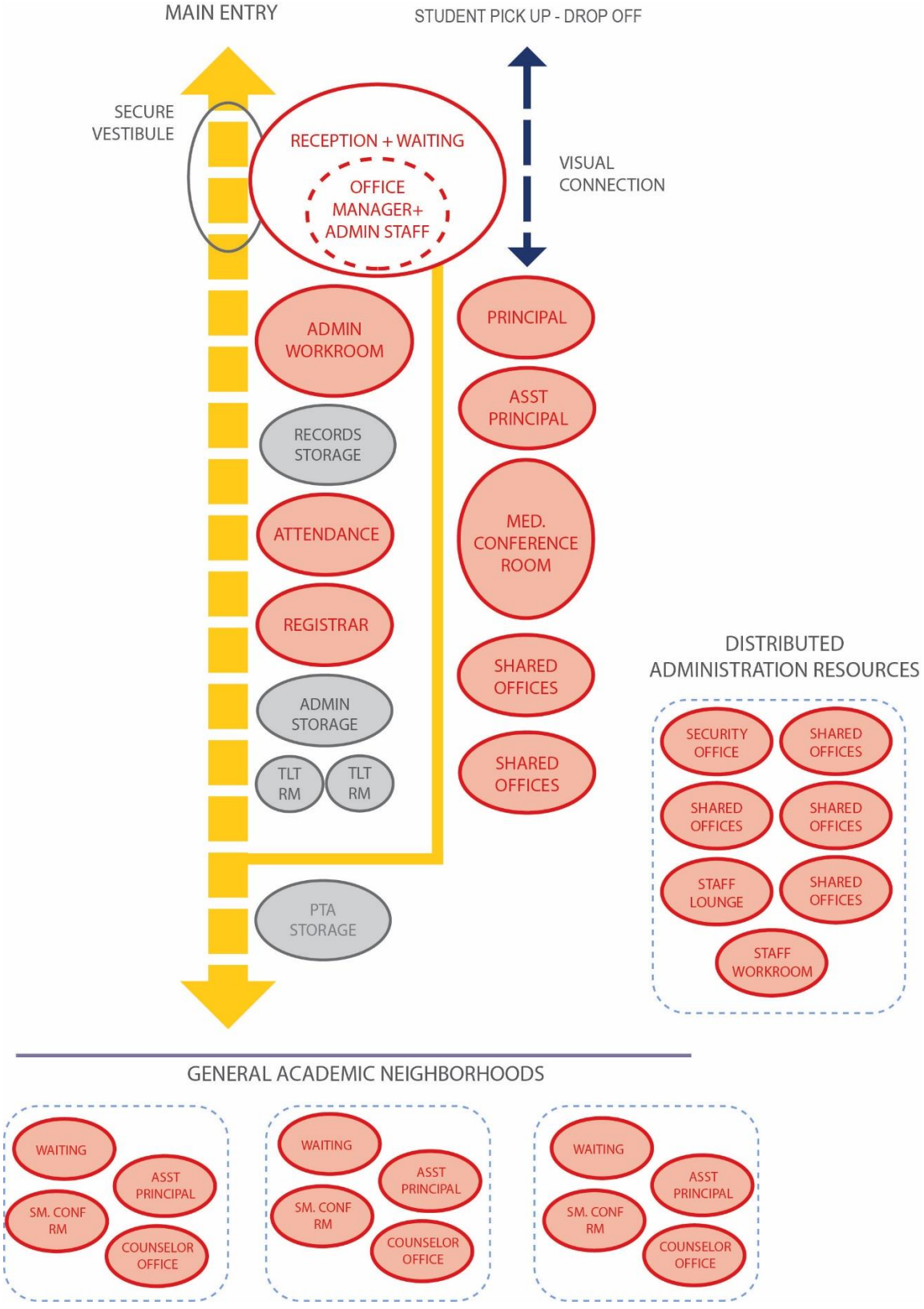
Parent/Volunteer Storage

- Locate near main entry but outside of administrative area.

Meditation Rooms

- Locate next to administrative or counseling offices for supervision.
- Locate with close proximity to a toilet room for access to water.

Adjacency Diagram



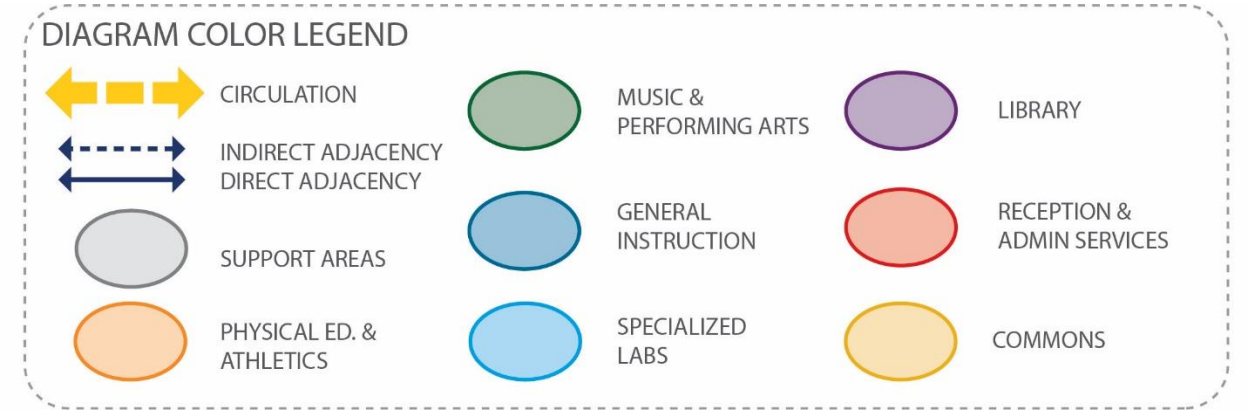


DIAGRAM COLOR LEGEND
CIRCULATION
INDIRECT ADJACENCY
DIRECT ADJACENCY
SUPPORT AREAS
PHYSICAL ED. & ATHLETICS
MUSIC & PERFORMING ARTS
GENERAL INSTRUCTION
SPECIALIZED LABS
LIBRARY
RECEPTION & ADMIN SERVICES
COMMONS

Building School – Community Connections

Community partnerships, family engagement, and supporting students experiencing homelessness have become increasingly important priorities in ensuring student success as described in "What Do We Want: Strengthening Community and Collaboration."

In this section, we will provide detailed descriptions of the activities, spaces, and features needed to support these priorities.

Authentic Spaces for Community & Family Partners

SPS acknowledges the critical roles that families and partners fulfill and recognizes the need to provide space to support these relationships.

Therefore, we are recommending a substantial increase in the number and type of spaces to support relationships with community partners and families:

- A Family Engagement Room that will expand the PTA/Volunteer room typically provided, along with a Family Support Office/Conference Room.
- A dedicated suite of spaces for community partners that consists of a medium size conference/work room, and two adjacent offices.
- Small conference rooms clustered with the Distributed Administration suites to serve as:
    - informal meeting spaces for administrators and counselors to meet with students and families.
    - offices or meeting spaces for community partners

  (These are included in the program area summary under Administration/Counseling Services - Distributed Resources.)
- One additional shared office (single occupant) and one additional shared office (double occupant), distributed as needed within the school, to provide space for itinerant staff who serve students in multiple schools, or for community partners, at the school's option.
  (These are included in the program area summary under Administration and Counseling- Distributed Resources.)

Activities for Community Spaces

Family & Community Partner Support

Family Engagement Room

- Parents and community members can collaborate with students and families as learning partners.
- Families can access essential services in a relaxed atmosphere.
- Gathering for two or three separate families and their students
- Before and after school studying.
- Families utilizing a multi-lingual resource library.
- Younger children playing with toys to keep them occupied while students and families access services.
- Students & families working at school-provided desktop computers.
- Display, to share school activities and resources.
- Store personal belongings of unaccompanied youth during the school day

- Access beverages to support a welcoming and hospitable environment.
- Support parents who are volunteering in the classrooms
- Parents and volunteers can conduct small meetings, and store/access PTA supplies.
- Laptop charging for students and families.

Family Support Office/Conference Room

- Family support worker, if funded, can conduct meetings.
- Families can use space for private phone calls or meetings.

Community Partners Conference/Workroom

- Community partners can meet with staff, students, or family members.
- Partners can access basic supplies, small office equipment, and water for refreshments to support meetings.

Community Partner Offices

- Community partners can conduct administrative and office work, or host small meetings for 1-2 guests.

Conference Rooms within Admin/Counseling Services - Distributed

It is expected that the small conference rooms within the Distributed Admin/Counseling Services suites will not be "owned" by the staff in that suite, but rather be a school-wide resource for use for:

- Meetings between staff and students
- Meetings between community partners and students or families
- Meetings between students and community mentors

Administration: Distributed Resources: Shared Offices

- Offices or meeting spaces for community partners
- Offices or meetings spaces for itinerant staffs

Program Area Summary

Space Description	# Adults	# Guests	# T.S.	# Rooms	Unit SF	Total SF
Family Engagement Suite						
Family Engagement Room	-	-	-	1	900	900
Shower/Changing room	-	-	-	1	65	65
Toilet, All Gender (min 2-stall)	-	-	-	1	120	120
Clothing & Backpack Storage	-	-	-	1	100	100
School Supplies Storage	-	-	-	1	20	20
PTA/Volunteer Storage	-	-	-	1	100	100
Family Support						
Family Support Office/Conf Room	-	-	-	1	120	120
Community Partner Suite – Conf / Workroom	Up to 10	-	-	1	240	240
Community Partner Office	1	-	-	2	120	240
Required Subtotal						**1,905**

T.S. = Teaching Station
* Small conference rooms are included in the program area summary within Administration/Counseling Services-Distributed.
** One additional single-occupant shared office and one additional double-occupant shared office are included in the program area summary within Administration and Counseling- Distributed Resources.

Spatial Descriptions

Family Engagement Room

- Gathering for two or three separate families and their students in comfortable lounge chairs (seating for 8-10 total).
- Provide study space for up to 12 students, to be accommodated with three 42" round tables with 4 chairs each.
- Provide built-in or mobile shelving for resource library.
- Provide built-in or mobile storage for toys to occupy younger children.
- Provide space for 3 students/family members to work at school-provided desktop computers.
- Provide ~16 LF of display wall to share school activities and resources.
- Essential Belongings Storage: Provide a total of 48 half-height lockers for storage for unaccompanied youth who need to store belongings during the school day. The lockers should be located in or near the Family Engagement Suite and/or near the Counseling offices, as it is often a counselor who discreetly places items in the student's locker during school hours.
- Provide hooks to accommodate up to 12 student backpacks.
- Provide a beverage station with a sink, and space for a coffeemaker to support meetings.
- Provide 4 each 2-file-drawer lockable mobile pedestals so parents volunteering in the classrooms can store their personal belongings.

- Provide space and power for laptop charging cart for schools with 1:1 program.
- A "back door" shall be provided to allow families to come and go after an emotional meeting without being on display.

Clothing & Backpack Storage

- Donated clothing should be stored on a minimum 6' wide, and 24" deep double-rod system with one upper and one lower rod mounted in parallel, within a lockable changing room. Mounting heights should accommodate shoes at the bottom of the closet. The opposite wall should have adjustable height shelving and wall hooks to support changing.
- To minimize any stigma, it would be ideal if clothing were stored in cabinets or an attractive space (rather than an unfinished storage room) with excellent lighting so that students could make their own selections and the experience of receiving donated clothing could be more like shopping.
- Food, clothing, and supplies are provided to students in backpacks. Backpack storage to be on shelves inside a lockable cabinet or within a secure storage space, adjacent to clothing and school supplies storage. The number of backpacks to be accommodated for middle schools is 48.

School Supplies Storage

- These will be stored in 35-gallon storage bins that are approximately 33" wide x 20" deep x 19" high. The number of bins to be accommodated for middle school is 9.
- Provide adjustable height shelving within a lockable cabinet.
- Location to be adjacent to clothing storage area.

PTA/Volunteer Storage

- Storage shelving for supplies and equipment for PTA sponsored events.

Family Support Office/Conference Room

- Provide flexible space that can be utilized as an informal office or a meeting room.

Community Partners Conference/Workroom

- Provide space with flexible/mobile furnishings to be configured for meetings of various size groups.
- Provide minimum 12 LF of base and upper cabinets for supplies storage, with countertop and sink along one wall.

Community Partner Offices

- Provide flexible space that can be utilized as an informal office or a meeting room.

Adjacency Descriptions

Family Engagement Room and associated spaces

- In Middle and High Schools, consideration should be given to locating the Family Engagement Room where it is accessible to students and families, as well as visible by other adults in the school, but not directly under the supervision of the Administration area; for example, adjacent to the counseling center or to the student commons.
- Support spaces directly adjacent to, and accessible from, the Family Engagement Room shall include:
  - Family Support Office/Conference Room
  - Toilet room (all gender)
  - Separate shower to provide opportunity for personal hygiene, as well as a changing room (all-gender)
- Clothing & Backpack Storage: Near the Family Engagement Room and its shower/changing room and toilet room.
- Schools Supplies Storage: adjacent to Clothing and Backpack Storage.

PTA Storage: it is preferred if it is near the Family Engagement Room.

Community Partners Conference/Workroom: Consider locating the community partners suite near the Family Engagement Room.

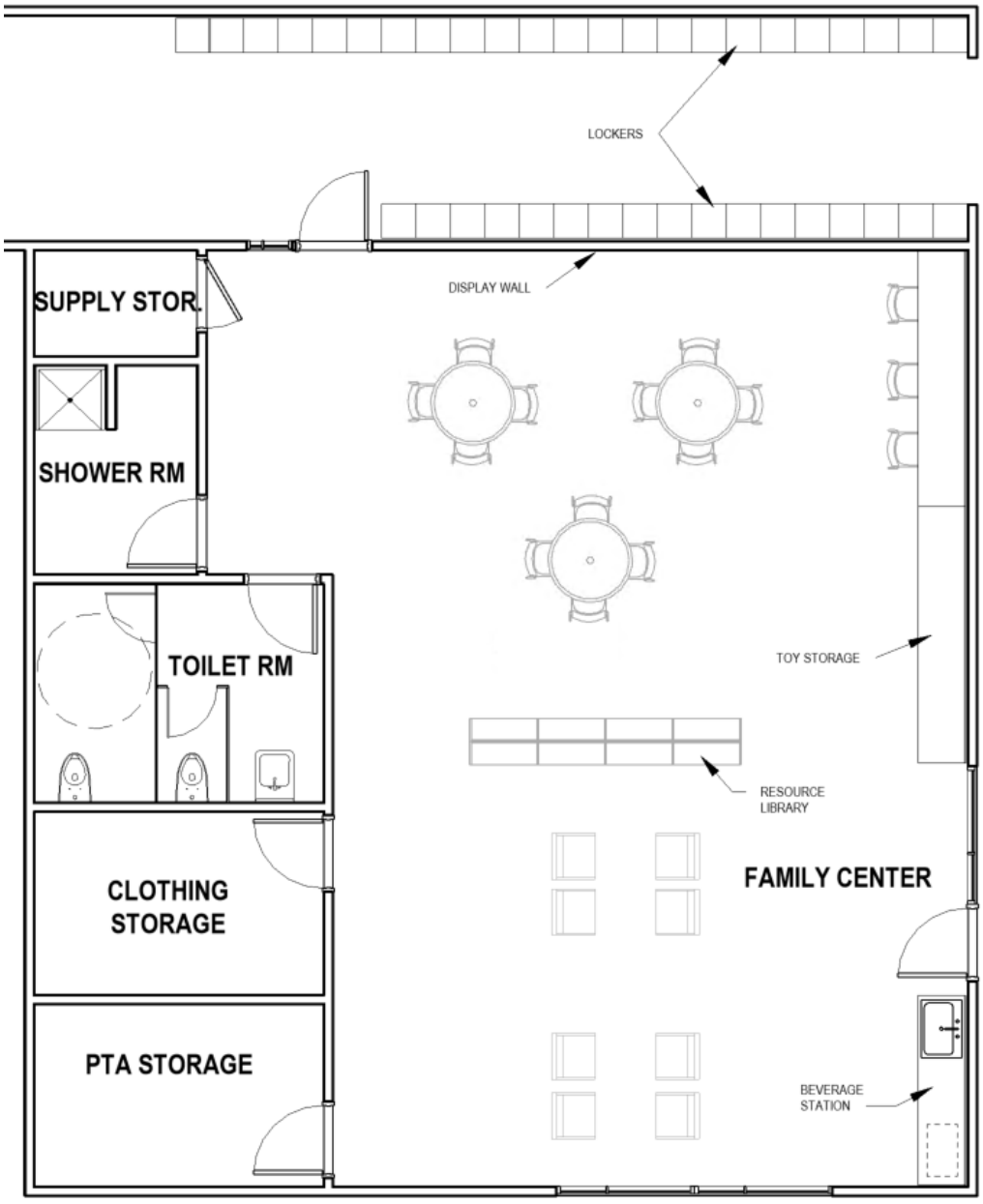
An alternate site-specific preferred location is acceptable as well.

Community Partner Offices:

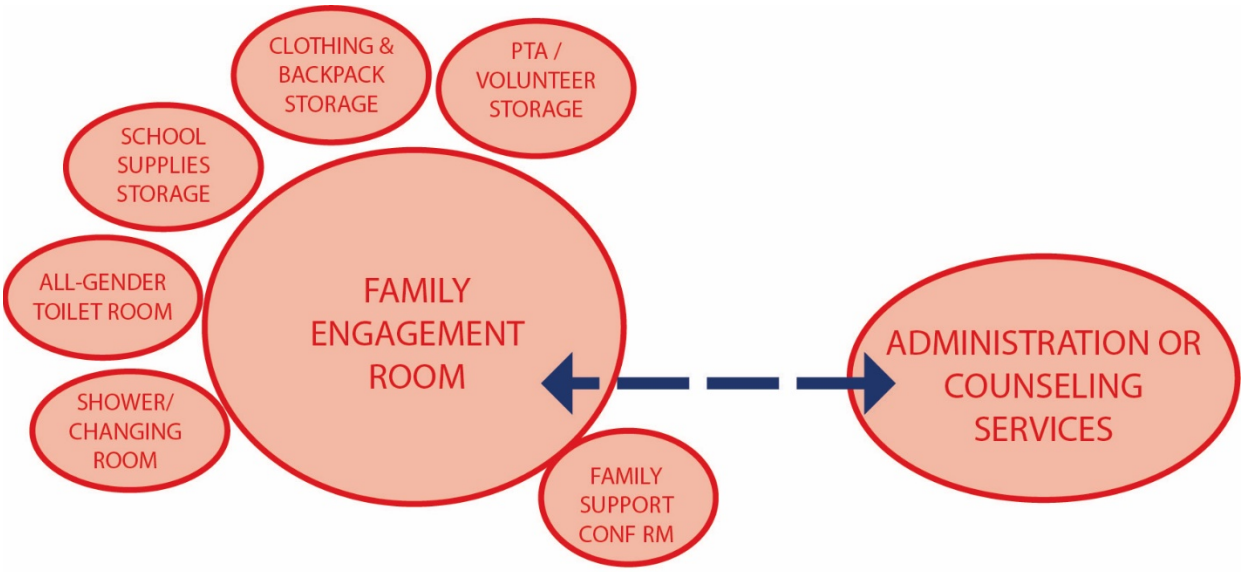
- Direct adjacency to the community partners conference/workroom.
- It is recommended these spaces be located for easy supervision but be independent of the existing conference and meeting spaces because the partners need space for extended periods of time.

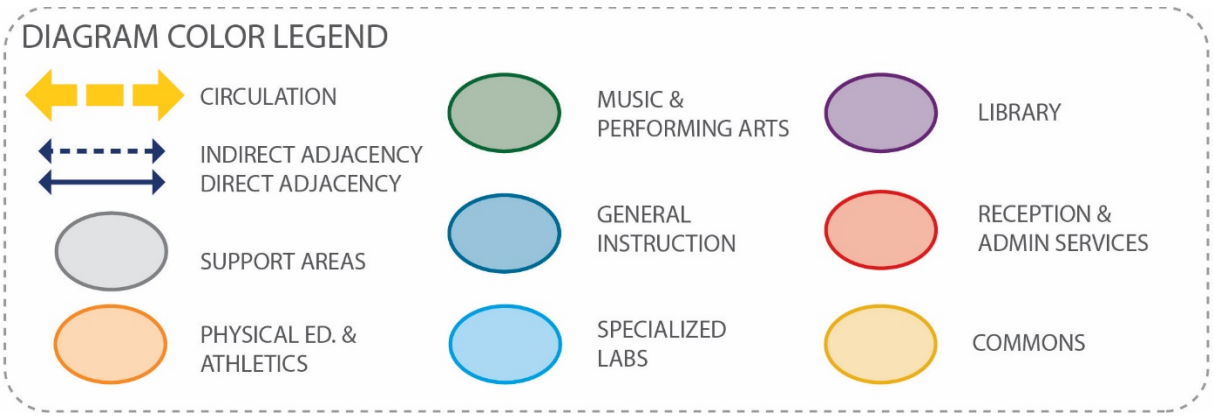
Space Layout

The layout below is intended to show the use of the space and amenities included in the Family Engagement suite.



Adjacency Diagram





Inclusive Support Spaces

Inclusivity means not just 'we're allowed to be there,' but we are valued.
I've always said: smart teams will do amazing things,
but truly diverse teams will do impossible things. - Claudia Brind-Woody

Student Lockers

General Purpose Lockers

When students were provided textbooks for each subject discipline, lockers were provided as a place to store those textbooks, as well as lunches, coats, sports gear, and other personal items. Over the past several decades, however, students have increasingly carried these items in backpacks. At most SPS middle schools, passing periods are only 5 minutes and most students do not have time to access their lockers without being late for the next class.

With the advent of digital textbooks, the need for lockers has been further diminished, though there are times during the day that some students still require lockers for securing items such as laptops, sports gear, musical instruments, or others.

Some administrators have noted there are significant disadvantages to providing lockers, including:

- Providing a place for hiding contraband such as illegal substances or weapons.
- Generating noise and disruption (particularly true for metal lockers).
- Fostering class interruptions when students leave to get something they forgot in their locker.
- Lining interior walls that could otherwise provide transparency for supervision.
- Lockers along hallways add turbulence to the flow of students during passing time and can generate opportunities for conflict among students.
- Further, they create a significant management burden for school staff.

The addition of lockers substantially increases the required hallway width because of the additional area needed in front of the lockers for students to stand while accessing them. Thus, their cost is multiplied by a factor of three to four times the cost of the lockers themselves.

In the High School Ed Specs development, it was agreed with Directors of Schools and high school principals to use a mix of locker sizes:

- Locker size:
  - Standard size lockers - stacked four high (15" deep x 15" wide x 15" to 18" high)
  - Half height lockers (15" deep x 15" wide x 30" to 36" high)
  - Full height lockers (15" deep x 15" wide x 60" to 72" high)

  Full height lockers are for students who have sports gear, as they are large enough to fit lacrosse sticks.
- Locker quantity: provide lockers totaling about half of the enrollment capacity (This would mean 500 lockers for a 1,000-student middle school. Applying similar ratios as in the High School Ed Spec, this would translate to ~ 250 standard size, 175 half height, and 75 full height lockers.)
- Locker Locations: Generally, a mix of sizes should be distributed throughout in smaller groupings that reduce the acoustic impact and the institutional impression created by long walls of lockers. Some lockers should be provided near the Band Room for student-owned musical instruments (district-owned musical instruments will be stored within the Instrument Storage Room), and some lockers should be provided near PE spaces for students with sports gear.

Special Purpose Lockers

- Physical Education & Athletics: Lockers for PE clothes and street clothes in the locker room are still required. See section "What Do We Do: Physical Education and Athletics".
- Lockers for Unaccompanied Youth (students experiencing homelessness): As noted in the section "What Do We Do: Building School – Community Connections", a total of 48 half-height lockers shall be provided near the Family

Engagement suite and/or Counseling offices for unaccompanied youth to store their belongings throughout the school day and overnight.

Restrooms

When providing restroom facilities for middle schools it is important that they are inclusive, supportive, safe, and nondiscriminatory for all students. Accessibility for students can be addressed in multiple ways by providing restroom facilities that support students' physical needs, cultural needs, as well as students gender identity.

In the Middle School Ed Spec development, it was agreed amongst the school administrators that a maximum of three stalls per restroom is preferred for both gendered and all-gender restrooms. This minimizes the number of unsupervised students in the restroom at one time and reduces the risk of harassment/bullying within the restroom. (See section "What Do We Know: Lessons Learned: Post Occupancy Debriefs from Recent Middle Schools".)

Cultural

Cultural traditions and religious teachings have significant influences in the design, location and the way users use the toilets.[1]

- Physical hygiene and cleanliness at home are part of important doctrines in many cultural traditions and religious faiths. Many religions relate cleanliness as an embodiment of a person's 'moral-existential system' and spiritual purity.
- Water has been widely used for bodily cleansing as part of religious ritual washing and symbolizes one's purification (e.g. Islam, Judaism and Zoroastrianism), sacredness (e.g. Hinduism and Shinto), wealth (e.g. Buddhism) and cleansing of one's sin (or seeking spiritual refreshment and blessing) (e.g. Christianity).

As noted in the section "What Do We Know: Lessons Learned: Post Occupancy Debriefs from Recent Middle Schools", it is important to provide a mix of restrooms as there are many cultures that require gender separation.

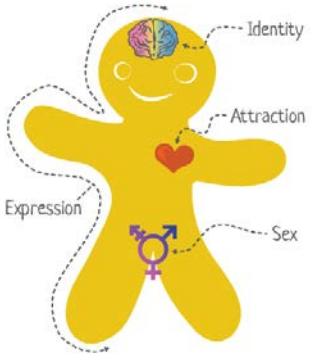
Gender

March 5, 2020, SPS approved the Superintendent Procedure 3210SP.C – Nondiscrimination and Affirmative Action: Transgender and Gender-Expansive Student Rights Supports[2] with the purpose of creating a safe, welcoming, and inclusive learning environment for all students, and to ensure that every student has equal access to all components of their educational program. Below are key implementations that have facility impacts.

- Restroom Accessibility: Students have the right to use the restroom that corresponds to the gender identity they consistently assert at school. Students who identify as gender "X" have the right to use the restroom the student determines best aligns with their gender identity.
- Locker Rooms: Students have the right to use the locker room that corresponds to the gender identity they consistently assert at school. Students who identify as gender X have the right to use the locker room the student determines to best align with their gender identity.
- Gender Segregation in Other Areas: As a general rule, schools should consider options to avoid separating students by gender unless necessary.

When discussing restrooms by gender, it is important to understand gender terminology.[3]

- Biological Sex refers to an individual's sex assigned at birth.
- Gender Identity refers to an individual's internal sense of gender. A person's gender identity may be different from or the same as the person's sex assigned at birth.
- Gender Expression refers to the way in which a person expresses their gender identity, typically through their appearance, dress, and behavior.



[1] Othman, Towards more culturally inclusive domestic toilet facilities in Australia, 2015.
[2] Seattle Public Schools, Superintendent Procedure 3210SP.C, Nondiscrimination and Affirmative Action: Transgender and Gender-Expansive Student Rights and Supports.
[3] https://www.itspronouncedmetrosexual.com/2018/10/the-genderbread-person-v4/

- Sexual Orientation refers to a person's identity in relation to the gender or genders to which they are sexually attracted; the fact of being heterosexual, homosexual, etc.
- Transgender describes those individuals whose gender identity is different from the sex they were assigned at birth. A transgender male is someone who identifies as male but was assigned the sex of female at birth; a transgender female is someone who identifies as female but was assigned the sex of male at birth. [4]

Gensler's study of the "2019 National School Climate Survey" found that 8 in 10 students identifying as LGBTQ+ have experienced harassment at school.

For Public schools[5]:

- LGBTQ public school students were most likely to hear homophobic remarks at school and experienced the greatest levels of gender-based victimization, whereas those in religious schools were most likely to hear negative remarks about gender expression.
- Students in regular public schools were more likely to have LGBTQ-inclusive school library resources.

For Middle Schools[6]:

- LGBTQ students in middle school had more hostile school experiences than LGBTQ students in high school, including experiencing higher rates of biased language, victimization, and anti-LGBTQ discriminatory school policies & practices.
- LGBTQ middle school students were less likely than high school students to have access to LGBTQ related school resources, including Gender and Sexuality Alliances, supportive school personnel, LGBTQ-inclusive curricular resources, and inclusive policies.

In schools most cases of bullying occur in restrooms and locker rooms due to the lack of adult supervision.[7] Access to all-gender restrooms helps to eliminate harassment and other inconveniences that transgender and gender non-conforming students may experience when using gender segregated restrooms.

All-Gender Restrooms

An all-gender restroom is a space that has no association with a specific gender identity. All-gender restrooms benefit transgender people, people with disabilities, and anyone who may need assistance while using the restroom. Providing all-gender restrooms ensures that students can access safe and nondiscriminatory restroom facilities within the school. Design considerations for all-gender restrooms include:

Language

Using the term "all-gender" or "gender inclusive" is preferred. The term "Gender neutral" can be problematic in the LGBTQ+community because it erases the persons gender identity rather than embracing its diversity.[8]

Signage

Signage should be inclusive of all genders or be labeled using a pictogram without reference to a specific gender (e.g., no binary stick figures).

Privacy

When designing all-gender restrooms, it is important to have a sense of privacy at the

[4] Dear Colleague Letter: Transgender Students." U.S. Department of Justice, U.S. Department of Education, 2016, www.justice.gov/opa/file/850986/download.
[5] "Inclusive Design." Gensler Research Institute, 2018, www.gensler.com/uploads/document/570/file/GenslerResearch_RestroomDesign_lores_2018.pdf., page 28.
[6] Ibid.
[7] "The 4-1-1 on Bullying." Hamilton Fish Institute, 2004, www.ojp.gov/pdffiles1/ojjdp/grants/226235.pdf.
[8] "Inclusive Design." Gensler Research Institute, 2018, www.gensler.com/uploads/document/570/file/GenslerResearch_RestroomDesign_lores_2018.pdf, page 28.

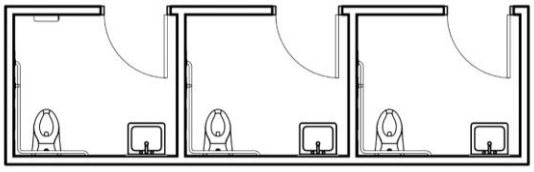
toilet compartment. This can be done by providing fully enclosed toilet compartments, full height toilet partitions, or "zero-sightline" toilet stalls.

Access

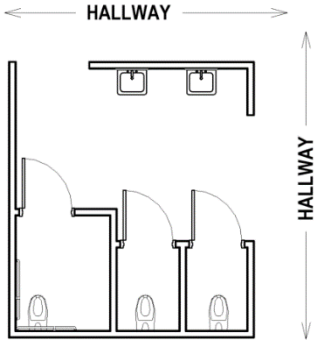
Using the restrooms should not be a stressful experience for students however for transgender students it can be. In schools where all-gender restrooms are not available, students often must plan their day around access to restrooms. The location of all-gender restrooms should be intentional and located off the main path of circulation where it is possible to allow for passive supervision. It is recommended that one all-gender restroom be located within one building level of any user.

Solutions for all-gender and inclusive restrooms should allow people to use the facility in which they feel safest. This minimizes the number of unsupervised students in the restroom at one time and reduces the risk of harassment/bullying within the restroom. There are three commonly used design solutions that have been identified and are outlined below.[9]

Single-User - Single-user restrooms provide privacy for all users and can be located off the main circulation for easy access for students of all genders.



Multi-stall - Full height partition walls are used to provide privacy for students and are available to students of all genders.



Additional Design Considerations

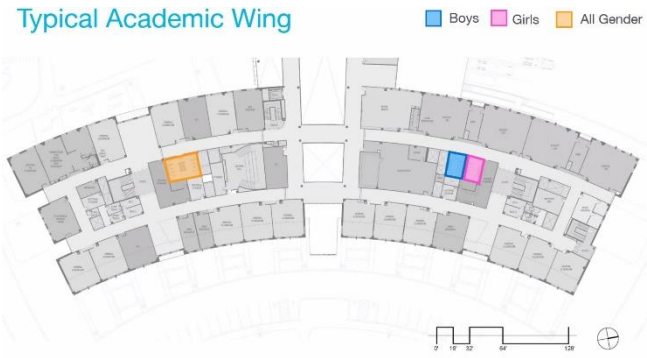
Site-Specific Modifications

Given the evolving discussion about the best way to accommodate all gender toilet and locker rooms, the site-specific Ed Spec can propose modifications to meet the needs of students, but the Board resolution minimums must still be met.

[9] Ibid.

Restroom Type Locations

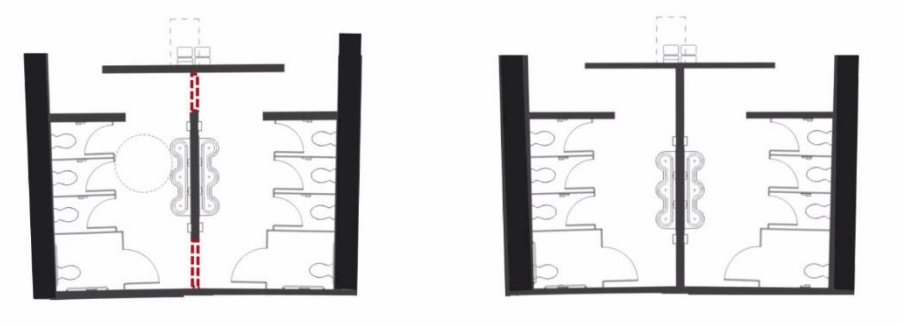
- Consider locating restrooms so a student does not need to travel far to access a restroom facility that supports their physical & cultural needs, as well as their gender identity. A good example is locating binary gender toilet rooms on one side of the wing and an all-gender toilet room on the other. On the floor below or above, flip the binary gender toilet room with the all-gender toilet room.[10]
- Consider locating a single-user toilet room next to a multi-user toilet room.

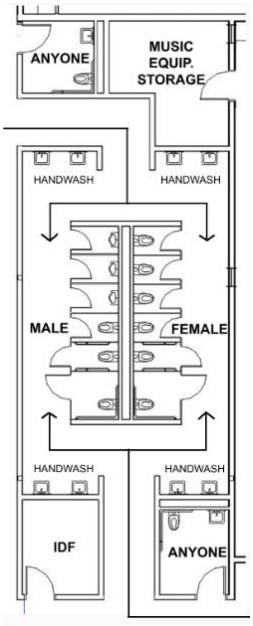


Future Flexibility

When designing for a binary gender toilet room or an all-gender toilet room, below are some ideas:

- Plan for future flexibility when locating plumbing and electrical so a portion of the wall can be demolished to create an all-gender restroom[11] (below).
- Or provide (2) entrance/exits into a binary gender toilet room so that in the future it can easily become an all-gender restroom[12] (right). An additional benefit to having multiple entrances/exits allows multiple routes of egress to avoid confrontation.





Accessibility

Provide accessible toilet stalls / rooms per the building code.

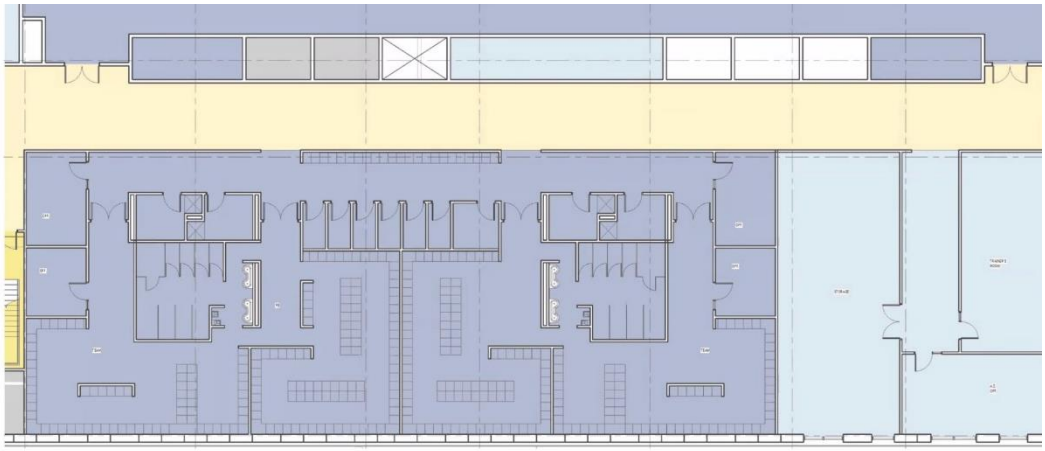
Code

With the pending 2021 code change, the number of fixtures required will be equal to the number of fixtures currently required to be provided for each sex, but they will not need to be segregated. The difference between gender segregated facilities and inclusive facilities will have an impact on space and building design for the better.[13]

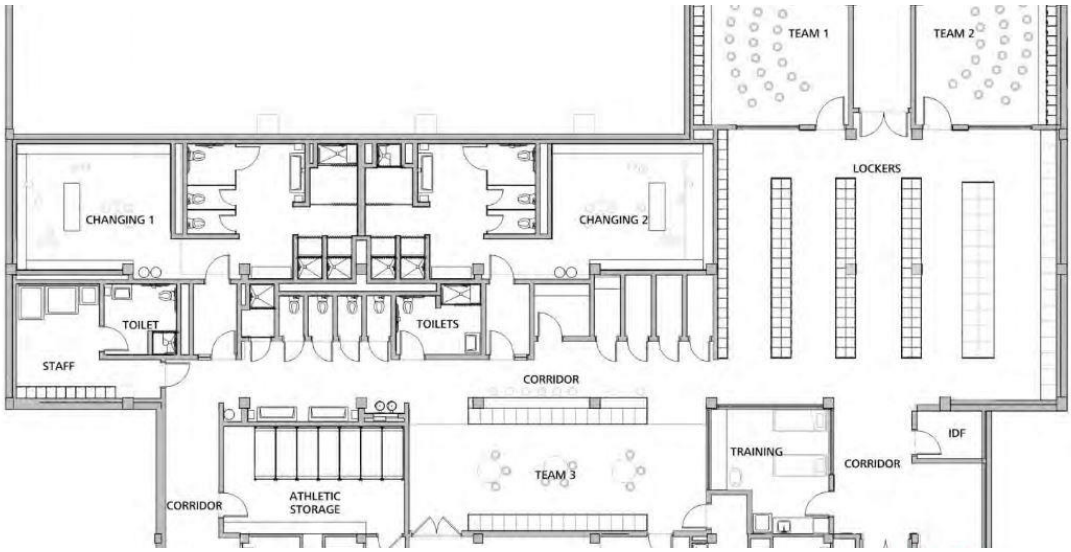
[10] Boston Society of Architecture, Zoom Webinar: K-12 Educational Design Community: All-Gender Facility Configuration in Schools
[11] Ibid.
[12] Integrus Architecture, Einstein Middle School, 2019
[13] Cuningham Group, Inclusive Restroom Design Guide, 2020

Student Locker Rooms

Like toilet room design, locker rooms should be designed to be inclusive, supportive, safe, and nondiscriminatory for all students.



Below are examples to start the discussion during the site-specific ed specs. Examples presented in K-12 Educational Design Community: All Gender Facility Configuration in Schools webinar.[14]



During a BEX Oversight Meeting, Mahlum Architects presented the Lincoln High School Schematic Design Presentation[15] which talked about how they approached inclusive design for the locker room proposed at Lincoln High School.

[14] Boston Society of Architecture, Zoom Webinar: K-12 Educational Design Community: All-Gender Facility Configuration in Schools

[15] Mahlum Architects, Lincoln High School Schematic Design Presentation, February 2021

Adult Shower/Changing Rooms

Provide a pair of single shower /changing rooms for adult cyclists commuting to/from school. When feasible, shower rooms can be adjacent to or combined with the staff toilet rooms for custodial and/or kitchen staff.

Locate near a secondary entry in proximity to the long-term bicycle storage area.

Each shower room should include a built-in bench for changing, and 12 half-height double-tier lockers.

Hand Hygiene

To provide a sanitary environment for students, handwashing stations should be located near the major entries of the school. These stations should be visible from the main circulation but located in such a way as to not block the flow of traffic.

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Student Lockers*, **, ***, ****	-	-	-	Allowance	1500	1,500
Required Subtotal			**0**			**1,500**

T.S. = Teaching Station

* Includes added hallway width to access lockers

** Based on mixed sizes and types

*** Locker rooms – see Physical Education and Athletics section

**** Toilet rooms and area for hand hygiene are included in the general support program area

Instructional Technologies

Technology Equipment Standards for Middle Schools

In support of its Technology Plan discussed in the section "What Do We Know - Planning for Tomorrow's Technology Needs," the district has identified the equipment and infrastructure necessary to provide equitable access to technology resources as facilities are modernized or replaced.

The 2020 pandemic and the extended need for remote instruction for all students forced the district to accelerate the purchase of student devices at a 1:1 ratio. As a result, computer labs for the purposes of teaching keyboarding and technology skills development will no longer be necessary. Dedicated labs with desktop computers and larger monitors will only be provided for specialized classes as noted in the section under Specialized Labs and Classrooms below.

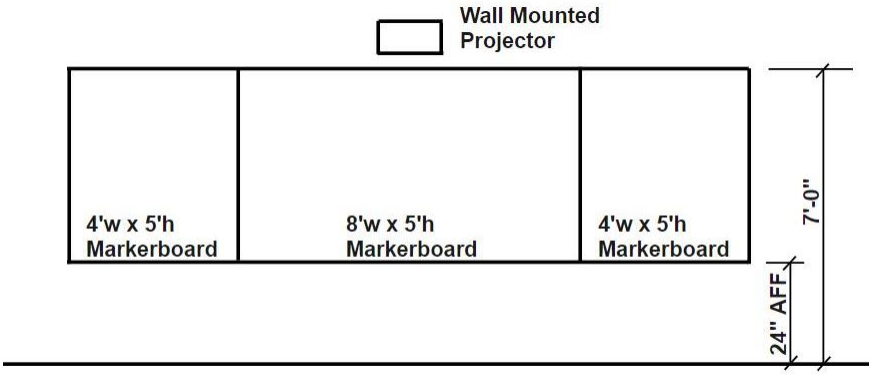
Teaching Wall, Presentation Stations and Teacher Workstations

All spaces identified as Teaching Stations (including General Education Classrooms; Special Education Classrooms; Classrooms for World Languages; Classrooms or Labs for Science and/or CTE; classrooms for Visual Arts, Performing Arts, and the stage; both stations in the Gymnasium; and the whole-class instruction area(s) within the Library) shall be provided with the following:

Teaching Wall:

The configuration of the teaching wall, shown in the SPS Technology Plan,[1] has been confirmed for the foreseeable future.[2] While flat screen technology may be utilized in smaller spaces such as conference rooms, DoTs recommends that laser projectors will be utilized in lieu of the current Hitachi CP-TW3005 Ultra-Short Throw Interactive Projectors shown in the current Technology Plan. Laser projectors would be located on the teaching wall similarly to the Hitachi projectors, and the whiteboard will double as the projection surface.

With technology ever changing, provide conduit and plywood backing on the entire teaching wall behind the center markerboard for future flat screen display. If the display is provided, the two side markerboards would be relocated, so the entire teaching wall should be finished and painted behind all markerboards and tack boards.



Presentation station:

The SPS Technology Plan for 2019-2023 envisions that teacher presentation stations will include a laptop and a smaller document camera, both provided on the presentation cart, with cable connections to the teaching wall. It is yet to be determined whether the district will move toward use of a Miracast dongle that will allow the transfer of high-definition video signals from the laptop to a display without the use of a cable, which would mean the presentation station could be anywhere. However, for the foreseeable

[1] SPS Technology Plan, 2019-2023, Version 1.0, February 12, 2019, p. 42.
[2] Middle School Ed Spec Meeting with Dept of Technology Services staff: Director of Infrastructure, and Manager of Technology Services, December 18, 2020.

future, the document camera will be connected to power rather than rechargeable, so the presentation cart will still be tethered to the teaching wall.

Teacher workstation:

Power and data connections should be provided for two potential desk workstations within each classroom or lab. As of a December 2020 meeting with DoTS, it is unclear whether an additional laptop will be provided to each teacher for their workstation,[3] but the power & data connections at either desk workstation will allow for that.

Computers for Instructional Assistants:

The Technology Plan anticipates providing computers to Instructional Assistants for the first time. The location where Instructional Assistants work varies between subject disciplines and between schools. They may need a small laptop table within a classroom or may be able to work in a small group or conference room. The SPS Standard Space Types for FF&E do not yet reflect this change, so design teams should work with their specific school to determine whether any additional considerations are necessary.

Student Computing Devices and Infrastructure Support

This is a discussion of general approach to devices and infrastructure support. For requirements specific to each program and space, see individual sections for those programs and departments.

Most student devices are mobile in the form of either laptops or tablets.

- For Grades K-2, the student device is a tablet.
- For Grades 3-12, the student device is a laptop.[4]

Student laptops will be expected to have a four-year life, and laptop batteries will degrade so they will not make it through the entire school day when nearing the end of their lifespan. Until wireless charging or better batteries are available, it should be expected that at any one time about 25% of the students within a class will need their laptops connected to power strips and/or charging blocks, using the ample number of perimeter wall outlets provided within a new capital facility.

General Education Classrooms

- As of 2020, student devices have been issued at a ratio of 1:1. In the 1:1 model, students will be taking their laptops home with them each day, so classroom charging stations will no longer be utilized.
- The old standard for providing 6 desktop stations within each classroom, and the more recent model of providing 16 devices for each classroom within a charging cart, are no longer applicable.

Learning Commons and Small Group Collaboration spaces: these are breakout spaces, rather than direct instruction spaces, so collaboration and display, such as a combination of whiteboards, tack boards, and/or flat panel display, should be considered options rather than projection with a presentation cart. Provide at least one wireless access point.

Specialized Labs and Classrooms

In middle schools, a few of these spaces may still require the use of dedicated computing devices in addition to each student's mobile devices. Desktops will still be in use for those software programs that require large amounts of working memory and/or student work that requires the use of large displays, at the ratio of one per student. The Technology Plan identifies 21" iMacs for those stations, but SPS is moving toward standardization on PC computers, so they will be providing separate desktop CPU's and monitors; the form factors of CPU's are now small enough they can fit behind the back of a monitor, so no specialized furnishings are required. The standard 24" deep student table can be utilized. These are currently anticipated to include:

- Career & Technical Education:
  - While middle school CTE is moving toward offering a survey course called the STEM Innovation Lab, some schools may choose to retain the current course offerings that focus on computer science, engineering design, and similar topics. Design teams shall confirm the specific CTE courses to be accommodated for the Site-Specific Ed Specs.

[3] Middle School Ed Spec Meeting with Dept of Technology Services staff: Director of Infrastructure, and Manager of Technology Services, December 18, 2020.
[4] Ibid.

  - For schools retaining current CTE courses: design teams shall work with CTE to determine the type of devices to be supported and the resultant power and data requirements.
  - Schools adopting the STEM Innovation course: Either or both Universal Labs may require desktops plus monitors, but these might displace space for other desired activities, so design teams should work with the Middle School CTE Coordinator to determine the number of desktop computers to be accommodated in each lab.

- Science Labs: Provide teaching wall power & data configuration, as well as power & data typical for student workstations.

- Visual Arts:
  - Visual Arts Classroom/Lab: Provide teaching wall, power, and data for typical teaching station.
  - Future Graphic Arts & Digital Photography classroom: Desktops may still be in use for those software programs that require large amounts of working memory and/or student work that requires the use of large displays, at the ratio of one per student. Based on discussions with the Visual Arts Program Manager, a potential future course on Digital Graphics and Photography should be planned for one classroom adjacent to the Visual Arts or a CTE/STEM Lab. This classroom shall provide adequate power and data for up to 30 desktop student workstations, like that to be provided for the CTE labs.

- Performing Arts Classrooms: Provide teaching wall, power, and data for typical teaching station, EXCEPT one 4 x 8 whiteboard shall have music staff lines.

- Main Gym and Fitness Space:
  - Provide typical teaching wall, power, and data for each of the two teaching stations in the gym, as well as the one in the Fitness Room, EXCEPT that the projectors shall be mounted on a presentation cart and secured within the PE Office or PE Storage Room when not in use.
  - The Physical Education program is currently using Fitbits for students to conduct fitness assessments. Outlets for charging up to 60 such devices shall be provided within the PE Storage Room.
  - In addition, 4 wireless access points (with protective enclosures) shall be provided at the gymnasium to support the number of devices, and 2 wireless access points shall be provided at the Fitness Room.

- Library/Information Hub:
  - Online Public Access Computers (OPAC's) tablets shall be distributed around the room to provide access to library resources. See "What Do We Do - Library and Information Services" for quantity and locations.
  - With 1:1 student-laptops, additional power will be required for two purposes:
    - Students will be working with their laptops individually, in small groups, and within the whole-group instruction area, so additional power outlets should be provided within each activity zone of the library, sufficient to power devices for 25% of the potential occupants in each zone.
    - DoTS may also elect to provide "swap carts" in the library, i.e. a few charging carts that have spare devices that can be "swapped" when a student's laptop is damaged.
    - No book detection systems are to be provided for libraries at any grade level.
  - Power shall be provided for two mobile display units on casters, consisting of a whiteboard on one side and a flat panel display on the other.
  - Wireless access points: provide at least 2, with brackets allowing them to be placed horizontally.

- Dining/Commons & Stage:
  - Wireless access points:
    - Provide at least 2 at the commons, with brackets allowing them to be placed horizontally.
    - Provide an additional WAP at the stage as it is typically used as a classroom.

- Main administrative conference room: flat panel display.

- Counseling center: no special technology needs beyond providing typical office and common area power outlets and wireless access points. No special student resource area is needed when students have their own laptops.

Technology Infrastructure for All Teaching Stations[5]

Data ports for the teaching stations shall be provided for:

- Mobile presentation station: 1 pair of data ports near the center of the teaching wall for the two presentation station devices
- Wall-mounted projector: 1 data port high on the teaching wall
- Telephone (choice of 2 workstation locations): 1 data port for teacher computer and 1 data port for telephone at each
- Wireless access points: 2 data ports at ceiling
- Total number of ports: 9 each

Wireless access points in ceiling: even with one-to-one student laptops, SPS is still using only WAP per teaching station. While the district used to pull 2 pairs of cables for each port, now the recommendation is for pulling 1 cable for single WAP and retaining a second port/cable for a future second WAP.

Specialized Requirements for Large Group Performance and Presentation Spaces

- Student Dining/Commons, Gymnasium, and Performing Arts requirements can be found in individual sections in "What Do We Do?"

Voice Enhancement Systems

All spaces identified as Teaching Stations (including General Education Classrooms; Special Education Classrooms; Classrooms for World Languages; Classrooms or Labs for Science and/or CTE; instructional spaces for Visual Arts, Performing Arts/Music, and the stage; and the class instruction area within the Library) shall be provided with a voice enhancement system as described in the district's Technical Building Standards. For the teaching stations in the Gymnasium, 2 portable sound systems will be provided to be used with the presentation carts (Front Row To Go Systems).

Instructional Technology Support

Simply providing technology hardware is not enough: students and staff must have adequate access to technology support to reap the full benefits of digital services. See section on "Library & Information Services" for activity descriptions and space requirements for this support function.

Other Specialized Technology Requirements for School Operations

Networked Printers & Copiers

Copying and printing has typically been accessible by adults, while students have used textbooks and handouts provided to them. The trend toward use of Open Educational Resources (OER) is increasing the use of documents in their digital rather than print format, so students may need to print them because the district is not buying as many "hardcopy" textbooks.

Students are given a printing allocation of a certain number of (black and white) copies, and if they need more than their allocation, they must purchase an additional allocation.

There are two goals for printer and copier locations; there should be easily observable access for students, & privacy for documents. Document privacy can be managed using PIN codes input into the printer/copier once the sender is standing next to it.

The following are general guidelines for placement of printers and copiers that require dedicated power and/or data ports. Design teams should confirm placement via review of floor plans with SPS Printing Services in late Design Development or early Construction Documents phase.

High volume printer-copiers (requiring dedicated circuits) should be provided at the following locations:

- Administrative workroom
- Main staff workroom
- Library/information hub near the circulation desk for supervision

Smaller cart-based or countertop printer/copiers should be anticipated in each learning commons & each satellite staff workroom.

[5] Middle School Ed Spec telephone discussion with Eric Kinzel, DoTS, 1/14/21

- Each learning commons
- Satellite staff workrooms

Nutrition Services (kitchen/server):

- PayPAMS > SchoolPay system: provide power at designated locations for as many as three payment registers at the serving lines, and wireless access point or hardwired ethernet ports as determined by Nutrition Services.
- A digital menu system using flat panel displays is under consideration. Design teams shall confer with Nutrition Services.

Infrastructure for Building-Wide Technology Systems

See Seattle Public Schools Technical Building Standards for requirements for the following systems[6]:

MDF room shall accommodate:

At least 5 racks for:

- Voice, data & wireless networks, & intercom system
- Voice enhancement systems for classrooms (Front Row)
- Distributed Antenna System, when required.
- Building security, cameras, and access control systems

Four conduits shall be provided for:

- City of Seattle fiber optic cable
- Comcast coaxial cable, with extensions to IDF's. Conduit only; cable will be brought in by DoTS if the need arises.
- CenturyLink copper cable for analog elevator phone and emergency "red phone" in school office.
- Spare

IDF rooms, when needed, shall have space for:

- At least three racks, unless they serve a very small area, in which case a single wall-mounted rack will suffice for the systems being distributed.
- Building automated systems for HVAC and the like are typically not located within the MDF or IDF rooms.

Other Special Technology Considerations

Asynchronous, or distance learning

In the high school Ed Specs, the district's Chief Information Officer at the time advocated for dedicated conference rooms acoustically outfitted to support the production of digital lessons for later distribution, and/or live-streamed distance learning.

The Department of Technology Services no longer sees the need for this type of space in any of the schools, as SPS does not have the bandwidth or money to provide for more sophisticated distance learning than practiced as of Fall 2020.

Wi-Fi access after for students after hours

In response to the need for immediate distribution of technology resources created by the pandemic in 2020, SPS has distributed hotspots to students and families in need. Further, the district has been 'turning up' the Wi-Fi outside school buildings when there are events.

The district is also working with state and city governments to get more equitable internet access across the city. For example, the University of Washington is placing an antenna on a building to provide better coverage throughout the neighborhood.

Therefore, individual school facilities do not need to make provisions for after-hours Wi-Fi access.

[6] Middle School Ed Spec telephone discussion with Eric Kinzel, DoTS, 1/14/21.

Facility Operations

Maintenance employees are "**guardians of the school environment**"
for students, staff and the community, and their workloads continue to grow
as new technology and equipment requires new skills, increased duties, and responsibilities.[1]

Facility Operations

Facility Operations consists of Custodial Services, Maintenance Services, Environmental Services, Grounds, Self-Help Projects, and Property Management.[2]

- Custodial Services support day-to-day operations and cleaning of approximately 10,000,000 square feet of school's buildings[3] across the district.
- Maintenance Services provides a dependable, comfortable, and safe environment that fosters increased student achievement.
- Environmental Services support Resource Conservation, Utilities, and all building automation systems in SPS.
- Grounds Services support the learning process by promoting and maintaining a safe and healthy outdoor environment for students and community.

Departmental Goals

- Customer Service: Provide excellent customer service by proactively giving customers what they need.
- Quality: Provide quality products and services the first time, every time, with efficient use of available resources.
- Financial Stewardship: Collaborative, responsible, effective, and efficient use of funds, accountable to the taxpayers.
- Employee Satisfaction: Empowered, highly skilled, motivated, & valued employees working together to create superior schools.
- Community: Provide buildings that are designed, constructed, and maintained in collaboration with neighbors to enhance our communities.

On-site Custodial Staff

Custodial staff are responsible for operating the building's systems and performing light maintenance activities. Board Policy 6800 "Safety, Operations and Maintenance of School Property" states that "on site staff will be responsible for performing minor repairs which do not require a great amount of time, special skills, or special tools.[4]

In addition, they provide cleaning services such as regular sweeping, mopping, dusting, scrubbing and trash collection. They utilize larger cleaning equipment such as floor scrubbers that require additional storage space.

Custodial services are provided both during the school day and after school hours. Typically, maintenance work is performed after school hours, with larger tasks occurring during school breaks when students are not present.

Activities

- Building maintenance and repair activities that do not require specialized skills or tools.
- Building key checkout-and check-in.
- Custodial staff meetings and meal breaks.
- Deliveries – Please refer to previous section "What Do We Do – Site Circulation, Transportation, and Distribution."

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[1] National Education Association website > Our members > Education Support Professionals > Custodial & Maintenance Professionals. http://www.nea.org/home/18513.htm
[2] From Seattle Public Schools website > District > Departments > Facility Operations, accessed November 2020.
[3] Director of Major Preventative Maintenance Noah Greenberg.
[4] SPS website > Our District > School Board > Policies and Procedures > Series 6000 - Management Support > 6800, accessed Dec 2020

Program Area Summary

Space Description	# Staff	# Students	# T.S.	# Rooms	Unit SF	Total SF
Central Receiving / Storage / Workroom / Break Room	Up to 6	-	-	1	600	600
Lead Custodian Office	1	-	-	1	100	100
Staff Toilet/Lockers/Shower	1	-	-	2	80	160
Custodial Closet (distributed throughout)	-	-	-	7	80	560
Equipment Storage (allowance)	-	-	-	2	400	800
Furniture Storage (allowance)	-	-	-	1	400	400
Facilities & Grounds Storage	-	-	-	1	150	150
Boiler Room	-	-	-	1	1000	1,000
Mechanical Rooms (occupied floors)	-	-	-	allowance	9000	9,000
Mechanical Rooms (unoccupied floors)	-	-	-	allowance	5000	5,000
Electrical Rooms (main electrical room and satellite closets)	-	-	-	allowance	1000	1,000
MDF Room	-	-	-	1	300	300
IDF & Other Telecom/Data Rooms	-	-	-	3	130	390
Required Subtotal			**0**			**19,460**

T.S. = Teaching Station

Refer to SPS FFE Standards Space Types for Middle Schools for layouts and amenities. Note that some key adjacencies within each space are also indicated therein.

Space Descriptions

General

- Service window: provide sliding service window so that no one beyond custodial and warehouse staff need enter this space.
- Also provide a secure key drop for staff to return keys when the custodian cannot be present.
- The egress way and surrounding area should be visible from inside the building so that a person can safely leave alone.
- Exterior lighting for the pathway to the nearest parking area should be on a motion sensor.

Central Receiving/Storage

- Staging space within Central Receiving should accommodate 4 palettes of items that will be distributed directly into other spaces in the school.

- Please refer to previous section "What Do We Do – Site Circulation, Transportation, and Distribution" for door and entry requirements
- Accommodate at least 20 LF of full height storage shelving to store maintenance and custodial supplies.

Work Area:

- provide an industrial workbench and a work sink to accommodate maintenance work.

Staff Break Area

- Kitchenette: provide 10 lineal feet of base cabinets with drawers, with a sink, undercounter refrigerator, and microwave.
- Meeting and dining area: provide space for a table and up to 6 chairs near the kitchenette.
- Provide 8 half-height staff lockers for street clothes or personal effects.
- Break area should be somewhat removed from work area.

Lead Custodian Office:

- Accommodate adult workstation with desk, task chair, lateral file, mobile pedestal file, bookshelf and two guest chairs.
- Provide a wall-mounted key box, small service window and counter for key distribution, and built-in key drop for key return.

Staff Toilet/Locker Area

- Lockers shall be provided for both custodial and food service staff.

Equipment Storage

- Provide double door.
- Accommodate two walls of full height storage shelving and allow remaining floor area to remain free to accommodate custodial and maintenance equipment.

Custodial Closets

- Provide floor sink and mop rack to facilitate cleaning of nearby areas.
- Accommodate storage shelving, custodial equipment, and custodial cart.
- Hazardous chemicals are no longer used, so no special ventilation is required.

Furniture Storage

- Accommodate additional classroom furniture to allow enrollment flexibility without overcrowding classrooms.
- Provide double door.
- Floor area shall remain open to accommodate furniture.

Facilities and Grounds Equipment Storage

- Enclosed room for storage of large maintenance equipment and flammable materials.
- Accommodate storage shelving and vented flammable safety cabinet.
- Provide double door.

Adjacency Descriptions

General - Location

- Maintenance and custodial areas should be located where convenient to operations staff while creating minimal impact on the school community.
- Refer to section "What Do We Do – Site Circulation, Transportation, and Distribution" for additional adjacencies.

Central Receiving/Workroom/Storage Room

- Directly adjacent to the loading dock to enable ease of deliveries and staging of supplies.
- Located at a distance from student areas to minimize disruption from noise.
- It is preferred that the kitchen and dining/commons are near the service entrance for ease of access for deliveries as well as for convenience of daily trash removal and recycling.

Lead Custodian Office

- Near the boiler room and the main HVAC controls for the building.
- Locate where sightlines to the receiving area can be maintained.
- Locate directly adjacent to the workroom/breakroom.

Conference/Staff Break Room

- Near the Lead Custodian Office and can be open to adjacent areas.

Staff Toilet/Locker Area

- Locate in proximity to Food Service.

Equipment Storage

- At least 50% of square footage allowance shall be located central to building, or near Receiving/Workroom.
- Remaining square footage shall be located on other floors, near elevator.

Custodial Closets

- Directly adjacent to each pair of large toilet rooms as well as PE locker rooms, with access from hallway.

Furniture Storage Room

- Convenient to main classroom areas.

Facilities & Grounds Equipment Storage

- Convenient to Central Receiving/Workroom with easy access for grounds equipment, i.e. doors to exterior.
- Storage area can be separate from main building.

System Head End Locations are typically located as follows:

- Card access system: Lead Custodian Office
- DDC controls system: Boiler room or main mechanical room
- Intercom system: Reception/secretary, occasionally at service entry
- Security camera viewing station (web-based): Security office when provided.

Adjacency Diagram

Please refer to Student Commons & Dining - Adjacency Diagram.

Appendices

Appendix A: Space Features Tables
Appendix B: High Needs Capacity Model
Appendix C: Bus Dimensions
Appendix D: Delivery Truck
Appendix E: Important Information Map
Appendix F: Copier Electrical and Space Requirements
Appendix G: Ed Spec Exception Request
Appendix H: Parameters from Collective Bargaining Agreement for Certified Staff
Appendix J: Four Key Frameworks for High-Performing Middle Schools

	FINISHES																				CASEWORK																							SPECIALTIES & EQUIPMENT								
	Ceiling					Floors									Walls																													Whiteboard (Quantity)					Tackboard (Quantity)			
ROOM / SPACE DESCRIPTION	No special requirements	Acoustical ceiling	Moisture resistant ceiling/GWB	Acoustical treatment may be needed	Painted exposed structure and MEP/FP	No special requirements	Per program requirements	Carpet	Resilient flooring	Concrete - polished	Concrete - sealed	Tile	Wood	Walk-off carpet or mats	No special requirements - paint	Avoid paint on walls - natural finishes	Ceramic tile	Moisture resistant surfaces	Wall-mounted acoustical panels (above 8 ft)	Operable Wall	No special requirements	Per program requirements & FFE Space Type	Tall cabinets	Plastic laminate (p-lam) countertop (# LF)	Chemical resistant p-lam countertop (# LF)	Heavy duty workcounter	30"d x8'-0" l workbench	Lower cabinets (# LF)	Upper cabinets (# LF)	Wardrobe (lockable)	Lockable cabinets	Open base cabinets w/1" lip (# LF shelf)	Open shelving w/1" lip, 12" deep (# LF shelf)	Open shelving w/1" lip, 24" deep (# LF shelf)	Transaction counter with ADA height area	Worksurface for 2 staff; storage below	Mailboxes w/ deep shelving below	Library shelving system	Instrument Storage Casework	Max LF Full height heavy duty shelving	Storage hooks per FF&E Space Type Diagram	Closet rod with shelving above	Half height lockers or cubbies per FFE Space Type	No special requirements	4'x4', # required	4'x6', # required	4'x8' with music staff lines, # required	4'x8', # required	No special requirements	4'x4', # required	4'x6', # required	4'x8', # required
General Academic Neighborhoods																																																				
Academic Neighborhoods																																																				
General Education Classroom		x						x							x									18				18	18	x																		2		1		1
Flex Classroom, Full Size		x						x							x									18				18	18	x																		2		1		1
Flex Classroom, Half Size		x						x							x									8				8	8	x																		1		1		1
Neighborhood Learning Commons		x						x							x						x																								2					1		
Small Group Collaboration Room		x						x							x						x																											1		1		
Display		x						x							x						x																							x								2
Book / Technology Storage	x					x									x						x																							x					x			
Other General Education Classrooms																																																				
World Language		x						x							x									18				18	18	x																		2		1		1
School-wide Resource																																																				
Small Group Collaboration Room		x						x							x						x																											1		1		
MTSS Breakout Rooms		x						x							x						x																											1		1		
Central Science Kit Storage	x					x									x						x																							x					x			
Science																																																				
Science Classroom / Lab		x							x	x					x							x			60			60	20																			2		1		1
Science Storage / Prep Room		x							x	x					x										6			6	6					50										x					x			
Special Education																																																				
Resource Services (half-size)		x						x							x									8				8	8	x			60															2		1		
Access Services (half-size)		x						x							x									8				8	8	x			60															2		1		
Social-Emotional Learning (SEL) (full size)		x						x							x									18				18	18	x			72															2				1
Moderate Intensive (full-size)		x						x							x									18				18	18	x			72										8					2				1
Intensive Services (Distinct) (full-size)		x						x							x									18				18	18	x			72										8					2				1
Toilet Room with Elect Operated Changing Table			x									x					x					x																						x					x			
OT/PT (with Storage)		x						x							x																										x							1		1		
SLP & Psychologists Offices		x						x							x						x																							x					x			
Specialized Academic Neighborhoods																																																				
Career and Technical Education																																																				
Universal Lab		x							x	x					x										40			40	20	x																		2		1		1
Prep / Storage Room		x							x	x					x										6			6	6					50										x					x			

	SPECIALTIES & EQUIPMENT (cont.)																												DOORS, HARDWARE, WINDOWS																			
	Other Specialties																Appliances								Special Purpose (Owner Furnished)				Doors & Hardware																Windows			
																													Exterior				Interior															
ROOM / SPACE DESCRIPTION	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
General Academic Neighborhoods																																																
Academic Neighborhoods																																																
General Education Classroom	x																																x													x	x	x
Flex Classroom, Full Size	x																																x													x	x	x
Flex Classroom, Half Size	x																																x													x	x	x
Neighborhood Learning Commons	x																													x												x				x	x	x
Small Group Collaboration Room	x																																x							x								x
Display	x																																												x			
Book / Technology Storage	x																																			x									x			
Other General Education Classrooms																																																
World Language	x																																													x	x	x
School-wide Resource																																																
Small Group Collaboration Room	x																																x							x								x
MTSS Breakout Rooms	x																																x							x								x
Central Science Kit Storage	x																																x												x			
Science																																																
Science Classroom / Lab	x																																x													x	x	x
Science Storage / Prep Room	x																	1 prep					1 prep										x															x
Special Education																																																
Resource Services (half-size)	x																																x													x	x	
Access Services (half-size)	x																																x													x	x	
Social-Emotional Learning (SEL) (full size)	x																																x													x	x	x
Moderate Intensive (full-size)	x																																x													x	x	x
Intensive Services (Distinct) (full-size)	x																																x													x	x	x
Toilet Room with Elect Operated Changing Table	x																																			x									x			
OT/PT (with Storage)		x																															x															x
SLP & Psychologists Offices	x																																x							x								x
Specialized Academic Neighborhoods																																																
Career and Technical Education																																																
Universal Lab	x																																x													x	x	x
Prep / Storage Room	x																																x															x

	ELECTRICAL																																								
	Lighting					**Electrical**																	**Technology/ Communications Infrastructure**													**Technology Owner Furnished**					
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
General Academic Neighborhoods																																									
Academic Neighborhoods																																		x								
General Education Classroom		x						x	x																x			x	x												
Flex Classroom, Full Size		x						x	x																x			x	x												
Flex Classroom, Half Size		x						x	x																x			x	x												
Neighborhood Learning Commons		x				x																						x													
Small Group Collaboration Room	x										x																	x	x												
Display	x					x																	x																		
Book / Technology Storage	x					x																	x																		
Other General Education Classrooms																																									
World Language		x						x	x																x			x	x												
School-wide Resource																																									
Small Group Collaboration Room		x									x																	x	x												
MTSS Breakout Rooms	x										x																	x	x												
Central Science Kit Storage	x					x																	x																		
Science																																									
Science Classroom / Lab		x						x	x																x			x	x												
Science Storage / Prep Room	x					x																						x													
Special Education																																									
Resource Services (half-size)		x						x	x																x			x	x												
Access Services (half-size)		x						x	x																x			x	x												
Social-Emotional Learning (SEL) (full size)		x						x	x																x			x	x												
Moderate Intensive (full-size)		x						x	x																x			x	x												
Intensive Services (Distinct) (full-size)		x						x	x																x			x	x												
Toilet Room with Elect Operated Changing Table	x																			x			x																		
OT/PT (with Storage)	x							x	x																			x	x												
SLP & Psychologists Offices	x					x																						x	x												
Specialized Academic Neighborhoods																																									
Career and Technical Education																																									
Universal Lab		x						x	x				x		x										x			x	x												
Prep / Storage Room	x					x																						x													

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																			
	Plumbing																								HVAC/ Mechanical												
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
General Academic Neighborhoods																																				
Academic Neighborhoods																																				
General Education Classroom		x																					x												
Flex Classroom, Full Size		x																					x												
Flex Classroom, Half Size		x																					x												
Neighborhood Learning Commons	x												x										x												
Small Group Collaboration Room	x																						x												
Display	x																						x												
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MTSS Breakout Rooms	x																						x												
Central Science Kit Storage	x																						x												
Science																																				
Science Classroom / Lab		8																		x	1		x												
Science Storage / Prep Room		1															1 prep			x	x							1							1
Special Education																																				
Resource Services (half-size)		x																					x												
Access Services (half-size)		x																					x												
Social-Emotional Learning (SEL) (full size)		x																					x												
Moderate Intensive (full-size)		x												x									x												
Intensive Services (Distinct) (full-size)		x												x									x												
Toilet Room with Elect Operated Changing Table					x										x					x		x									x				
OT/PT (with Storage)	x																						x												
SLP & Psychologists Offices	x																						x												
Specialized Academic Neighborhoods																																				
Career and Technical Education																																				
Universal Lab		x																			1					x									
Prep / Storage Room	x																				x		x												

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	FINISHES: Ceiling: No special requirements	Acoustical ceiling	Moisture resistant ceiling/GWB	Acoustical treatment may be needed	Painted exposed structure and MEP/FP	FINISHES: Floors: No special requirements	Per program requirements	Carpet	Resilient flooring	Concrete - polished	Concrete - sealed	Tile	Wood	Walk-off carpet or mats	FINISHES: Walls: No special requirements - paint	Avoid paint on walls - natural finishes	Ceramic tile	Moisture resistant surfaces	Wall-mounted acoustical panels (above 8 ft)	Operable Wall	CASEWORK: No special requirements	Per program requirements & FFE Space Type	Tall cabinets	Plastic laminate (p-lam) countertop (# LF)	Chemical resistant p-lam countertop (# LF)	Heavy duty workcounter	30"d x8'-0" l workbench	Lower cabinets (# LF)	Upper cabinets (# LF)	Wardrobe (lockable)	Lockable cabinets	Open base cabinets w/1" lip (# LF shelf)	Open shelving w/1" lip, 12" deep (# LF shelf)	Open shelving w/1" lip, 24" deep (# LF shelf)	Transaction counter with ADA height area	Worksurface for 2 staff, storage below	Mailboxes w/ deep shelving below	Library shelving system	Instrument Storage Casework	Max LF Full height heavy duty shelving	Storage hooks per FF&E Space Type Diagram	Closet rod with shelving above	Half height lockers or cubbies per FFE Space Type	SPECIALTIES & EQUIPMENT: Whiteboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8' with music staff lines, # required	4'x8', # required	Tackboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8', # required
Visual and Performing Arts																																																						
Visual Arts																																																						
Visual Arts Classroom		x							x	x					x									24				24	24	x																			2		1		1
Kiln Room	x								x		x				x						x																											x				x			
Art Supply & Project Storage	x								x		x				x						x																											x				x			
Future Digital Arts Classroom (Gen Ed adj Arts)		x						x							x									18				18	18	x																			2		1		1
Visual and Performing Arts (cont)																																																					
Performing Arts																																																					
Performing Arts Classroom A (Choral/Orchestra)		x		x				x							x				x					6				6	6	x																			1	1		2			
Performing Arts Classroom B (Band)		x		x				x							x				x					6				6	6	x																			1	1		2			
Instrument Storage (Band)		x						x							x																												x					x					
Shared Storage Room (music stands/chairs)		x									x				x						x																										x				x			
Shared Music Library		x						x							x						x																											x				x			
Ensemble / Mixing Room		x						x							x				x		x																											1				1			
Practice Room		x						x							x				x		x																											1				1			
Physical Education																																																					
Physical Education																																																					
Gymnasium					x								x	x		x						x																															2				2
Fitness Room					x				x				x			x						x																										x				2				1
PE & Athletics Changing/Locker Rooms																																																					
Changing/Locker Room: Boys / Girls			x						x	x								x				x																										x				1			
Toilet / Shower: Boys / Girls			x									x					x	x			x																										x				x			
PE Teacher Office: Boys / Girls			x						x	x								x			x																										x				x			
All Gender Toilet / Shower			x									x					x	x			x																										x				x			
Storage																																																					
PE Storage Room	x										x				x																																		x				x			
Athletic Equipment/Uniform Storage Room	x										x				x						x																											x				x			
Community Partner Storage	x										x				x																																	x				x			
PE/Athletics Outdoor Equipment Storage Room	x										x				x						x																											x				x			

ROOM / SPACE DESCRIPTION	SPECIALTIES & EQUIPMENT (cont.)																											
	Other Specialties																Appliances								Special Purpose (Owner Furnished)			
	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor
Visual and Performing Arts																												
Visual Arts																												
Visual Arts Classroom	x																									12		
Kiln Room	x																								2			
Art Supply & Project Storage	x																											
Future Digital Arts Classroom (Gen Ed adj Arts)	x																											
Visual and Performing Arts (cont)																												
Performing Arts																												
Performing Arts Classroom A (Choral/Orchestra)	x																											
Performing Arts Classroom B (Band)	x																											
Instrument Storage (Band)	x																											
Shared Storage Room (music stands/chairs)	x																											
Shared Music Library	x																											
Ensemble / Mixing Room	x																											
Practice Room	x																											
Physical Education																												
Physical Education																												
Gymnasium		x		x	x		x	x	x							x												
Fitness Room						x																						
PE & Athletics Changing/Locker Rooms																												
Changing/Locker Room: Boys / Girls			x																									
Toilet / Shower: Boys / Girls												x																
PE Teacher Office: Boys / Girls			x																									
All Gender Toilet / Shower	x																											
Storage																												
PE Storage Room	x																											
Athletic Equipment/Uniform Storage Room	x																											
Community Partner Storage	x																											
PE/Athletics Outdoor Equipment Storage Room	x																											

ROOM / SPACE DESCRIPTION	DOORS, HARDWARE, WINDOWS																			
	Doors & Hardware																Windows			
	Exterior				Interior															
	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
Visual and Performing Arts																				
Visual Arts																				
Visual Arts Classroom	x				x													x	x	
Kiln Room					x												x			
Art Supply & Project Storage					x												x			
Future Digital Arts Classroom (Gen Ed adj Arts)					x													x	x	
Visual and Performing Arts (cont)																				
Performing Arts																				
Performing Arts Classroom A (Choral/Orchestra)					x					x								x	x	x
Performing Arts Classroom B (Band)					x					x								x	x	x
Instrument Storage (Band)													x				x			
Shared Storage Room (music stands/chairs)					x												x			
Shared Music Library					x												x			
Ensemble / Mixing Room					x															x
Practice Room					x															x
Physical Education																				
Physical Education																				
Gymnasium		x				x													x	
Fitness Room						x												x	x	
PE & Athletics Changing/Locker Rooms																				
Changing/Locker Room: Boys / Girls								x									x			
Toilet / Shower: Boys / Girls								x									x			
PE Teacher Office: Boys / Girls					x															x
All Gender Toilet / Shower								x									x			
Storage																				
PE Storage Room									x								x			
Athletic Equipment/Uniform Storage Room									x								x			
Community Partner Storage									x								x			
PE/Athletics Outdoor Equipment Storage Room				x													x			

ROOM / SPACE DESCRIPTION	ELECTRICAL																																								
	Lighting					Electrical																	Technology/ Communications Infrastructure													Technology Owner Furnished					
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
Visual and Performing Arts																																									
Visual Arts																																									
Visual Arts Classroom		x					x	x	x					x											x			x	x												
Kiln Room	x																		x				x																		
Art Supply & Project Storage	x					x																	x																		
Future Digital Arts Classroom (Gen Ed adj Arts)	x						x	x	x																			x	x												
Visual and Performing Arts (cont)																																									
Performing Arts																									x																
Performing Arts Classroom A (Choral/Orchestra)		x						x	x																			x	x												
Performing Arts Classroom B (Band)		x						x	x																			x	x												
Instrument Storage (Band)	x					x																						x													
Shared Storage Room (music stands/chairs)	x					x																	x																		
Shared Music Library	x					x																						x													
Ensemble / Mixing Room	x						x										x											x													
Practice Room	x						x										x											x													
Physical Education																																									
Physical Education										x																															
Gymnasium			x				x															x			x			x	x	x			x			x	x		x		
Fitness Room		x	x				x																		x			x	x	x						x					
PE & Athletics Changing/Locker Rooms																																									
Changing/Locker Room: Boys / Girls	x					x																						x													
Toilet / Shower: Boys / Girls	x					x																	x																		
PE Teacher Office: Boys / Girls	x					x																						x	x												
All Gender Toilet / Shower	x					x																	x																		
Storage																																									
PE Storage Room	x					x																	x																		
Athletic Equipment/Uniform Storage Room	x					x																	x																		
Community Partner Storage	x					x																	x																		
PE/Athletics Outdoor Equipment Storage Room	x					x																	x																		

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																		
	Plumbing																								HVAC/ Mechanical												
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
Visual and Performing Arts																																			
Visual Arts																																			
Visual Arts Classroom		x						2	x			x								x			x												
Kiln Room																				x					x										
Art Supply & Project Storage	x																						x												
Future Digital Arts Classroom (Gen Ed adj Arts)	x																						x												
Visual and Performing Arts (cont)																																			
Performing Arts													x																						
Performing Arts Classroom A (Choral/Orchestra)							x																x												
Performing Arts Classroom B (Band)							x																x												
Instrument Storage (Band)	x																						x												
Shared Storage Room (music stands/chairs)	x																						x												
Shared Music Library	x																						x												
Ensemble / Mixing Room	x																						x												
Practice Room	x																						x												
Physical Education						x																													
Physical Education																																			
Gymnasium													x																					x	
Fitness Room													x																					x	
PE & Athletics Changing/Locker Rooms																																			
Changing/Locker Room: Boys / Girls	x																			x														x	
Toilet / Shower: Boys / Girls					x										x	x				x			x											x	
PE Teacher Office: Boys / Girls	x																																	x	
All Gender Toilet / Shower					x										x	x				x														x	
Storage																																			
PE Storage Room	x																						x												
Athletic Equipment/Uniform Storage Room	x																						x												
Community Partner Storage	x																						x												
PE/Athletics Outdoor Equipment Storage Room	x																						x						x						

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	FINISHES: Ceiling: No special requirements	Acoustical ceiling	Moisture resistant ceiling/GWB	Acoustical treatment may be needed	Painted exposed structure and MEP/FP	FINISHES: Floors: No special requirements	Per program requirements	Carpet	Resilient flooring	Concrete - polished	Concrete - sealed	Tile	Wood	Walk-off carpet or mats	FINISHES: Walls: No special requirements - paint	Avoid paint on walls - natural finishes	Ceramic tile	Moisture resistant surfaces	Wall-mounted acoustical panels (above 8 ft)	Operable Wall	CASEWORK: No special requirements	Per program requirements & FFE Space Type	Tall cabinets	Plastic laminate (p-lam) countertop (# LF)	Chemical resistant p-lam countertop (# LF)	Heavy duty workcounter	30"d x8'-0" l workbench	Lower cabinets (# LF)	Upper cabinets (# LF)	Wardrobe (lockable)	Lockable cabinets	Open base cabinets w/1" lip (# LF shelf)	Open shelving w/1" lip, 12" deep (# LF shelf)	Open shelving w/1" lip, 24" deep (# LF shelf)	Transaction counter with ADA height area	Worksurface for 2 staff, storage below	Mailboxes w/ deep shelving below	Library shelving system	Instrument Storage Casework	Max LF Full height heavy duty shelving	Storage hooks per FF&E Space Type Diagram	Closet rod with shelving above	Half height lockers or cubbies per FFE Space Type	SPECIALTIES & EQUIPMENT: Whiteboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8' with music staff lines, # required	4'x8', # required	Tackboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8', # required
Learning Support																																																							
Library & Information Services																																																						
Reading / Stacks/ Circulation/ Group Instruction		x						x							x																					x	x		x									2		1		1
Workroom		x						x							x									8				8	8											x									x		1		
Conference Room, Medium		x						x							x						x																														1		1		
Conference Room, Small		x						x							x						x																														1		1		
Information Technology Support		x							x						x									12				6									x	x											x			x		
Technology Equipment Storage		x							x						x																																			x			x		
Student Dining & Food Service																																																						
Student Dining																																																						
Dining Commons				x					x	x				x					x			x																													x				2	
Vending Machine / Handwashing Niches		x							x	x					x							x																													x			x		
Community Kitchenette			x						x	x					x								x					4	4																					x			x		
Life Skills Teaching Kitchen			x						x			x			x									x				8	8																					x			x		
Pantry (for supporting homeless students)		x							x	x					x							x																													x			x		
Stage (w/ folding wall(s))				x									x		x					x	x																																2		1		1
Performing Arts/Stage Storage	x										x				x						x																																			
Changing Room / Makeup Area / Restroom		x							x	x		x			x		x	x						8																																
Food Service																																																						
Kitchen			x									x						x				x																																		
Walk-in Cooler	x						x											x				x																																		
Walk-in Freezer	x						x											x				x																																		
Dry Storage		x									x							x				x																																		
Managers Office		x							x						x						x																																			
Laundry /soap storage			x									x						x			x																																		
Servery			x						x	x								x				x																																		
Kitchen Toilet			x									x					x				x																																		

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	SPECIALTIES & EQUIPMENT (cont.)																															DOORS, HARDWARE, WINDOWS																							
	Other Specialties																			Appliances								Special Purpose (Owner Furnished)				Doors & Hardware																				Windows			
																															Exterior				Interior																			
	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
Learning Support																																																				
Library & Information Services																																																			
Reading / Stacks/ Circulation/ Group Instruction	x																															x												x	x	x					
Workroom	x																															x							x							x			
Conference Room, Medium	x																															x							x							x			
Conference Room, Small	x																															x							x							x			
Information Technology Support	x																																		x									x		x				
Technology Equipment Storage	x																																		x											x				
Student Dining & Food Service																																																			
Student Dining																																																			
Dining Commons	x																																x												x	x	x				
Vending Machine / Handwashing Niches	x																																																		
Community Kitchenette	x																			x			x																													
Life Skills Teaching Kitchen	x																			x		x	x	x	x							x												x	x				
Pantry (for supporting homeless students)	x																			x												x												x	x				
Stage (w/ folding wall(s))										x	x																					x												x					
Performing Arts/Stage Storage	x																															x												x					
Changing Room / Makeup Area / Restroom	x																															x												x					
Food Service																																																			
Kitchen	x																															x						x						x					
Walk-in Cooler	x																																		x									x					
Walk-in Freezer	x																																		x									x					
Dry Storage	x																															x					x							x					
Managers Office	x																															x							x										x
Laundry /soap storage	x																							x								x												x					
Servery	x																																																		
Kitchen Toilet			x																																x									x					

	ELECTRICAL																					
	Lighting					Electrical																
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks
Learning Support																						
Library & Information Services																						
Reading / Stacks/ Circulation/ Group Instruction		x					x	x	x													
Workroom	x					x																
Conference Room, Medium	x										x											
Conference Room, Small	x										x											
Information Technology Support	x						x															
Technology Equipment Storage	x						x															
Student Dining & Food Service																						
Student Dining																						
Dining Commons		x			x					x		x										
Vending Machine / Handwashing Niches	x																	x				
Community Kitchenette	x					x																
Life Skills Teaching Kitchen	x																		x			
Pantry (for supporting homeless students)	x					x																
Stage (w/ folding wall(s))					x			x	x													
Performing Arts/Stage Storage	x					x																
Changing Room / Makeup Area / Restroom				x		x																
Food Service																						
Kitchen	x						x															
Walk-in Cooler	x						x															
Walk-in Freezer	x						x															
Dry Storage	x					x																
Managers Office	x					x																
Laundry /soap storage	x																		x			
Servery	x						x					x										
Kitchen Toilet	x					x																

	ELECTRICAL																		
	Technology/ Communications Infrastructure													Technology Owner Furnished					
ROOM / SPACE DESCRIPTION	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
Learning Support																			
Library & Information Services																			
Reading / Stacks/ Circulation/ Group Instruction			x			x	x												
Workroom						x	x												
Conference Room, Medium						x	x												
Conference Room, Small						x	x												
Information Technology Support			x	x		x	x												
Technology Equipment Storage			x																
Student Dining & Food Service																			
Student Dining											x								
Dining Commons						x	x	x	x								x		
Vending Machine / Handwashing Niches			x																
Community Kitchenette	x																		
Life Skills Teaching Kitchen						x	x												
Pantry (for supporting homeless students)																			
Stage (w/ folding wall(s))						x	x												
Performing Arts/Stage Storage	x																		
Changing Room / Makeup Area / Restroom						x													
Food Service																			
Kitchen						x	x												
Walk-in Cooler	x																		
Walk-in Freezer	x																		
Dry Storage	x																		
Managers Office						x	x												
Laundry /soap storage	x																		
Servery					x	x													
Kitchen Toilet	x																		

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																
	Plumbing																									HVAC/ Mechanical									
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
Learning Support																																		
Library & Information Services						x																												
Reading / Stacks/ Circulation/ Group Instruction	x																																x	
Workroom		x																					x											
Conference Room, Medium	x																						x											
Conference Room, Small	x																						x											
Information Technology Support	x																						x											
Technology Equipment Storage	x																						x											
Student Dining & Food Service						x																												
Student Dining																																		
Dining Commons																							x											
Vending Machine / Handwashing Niches						x																	x											
Community Kitchenette			x																				x											
Life Skills Teaching Kitchen				x														x	x					x										
Pantry (for supporting homeless students)	x																						x											
Stage (w/ folding wall(s))	x																						x											
Performing Arts/Stage Storage	x																						x											
Changing Room / Makeup Area / Restroom	x																						x											
Food Service																																		
Kitchen					x															x			x											
Walk-in Cooler	x																						x											
Walk-in Freezer	x																						x											
Dry Storage	x																						x											
Managers Office	x																						x											
Laundry /soap storage											x						x													x				
Servery	x																						x											
Kitchen Toilet															x								x											

	FINISHES																				CASEWORK																							SPECIALTIES & EQUIPMENT								
	Ceiling					Floors									Walls																													Whiteboard (Quantity)					Tackboard (Quantity)			
ROOM / SPACE DESCRIPTION	No special requirements	Acoustical ceiling	Moisture resistant ceiling/GWB	Acoustical treatment may be needed	Painted exposed structure and MEP/FP	No special requirements	Per program requirements	Carpet	Resilient flooring	Concrete - polished	Concrete - sealed	Tile	Wood	Walk-off carpet or mats	No special requirements - paint	Avoid paint on walls - natural finishes	Ceramic tile	Moisture resistant surfaces	Wall-mounted acoustical panels (above 8 ft)	Operable Wall	No special requirements	Per program requirements & FFE Space Type	Tall cabinets	Plastic laminate (p-lam) countertop (# LF)	Chemical resistant p-lam countertop (# LF)	Heavy duty workcounter	30"d x8'-0" l workbench	Lower cabinets (# LF)	Upper cabinets (# LF)	Wardrobe (lockable)	Lockable cabinets	Open base cabinets w/1" lip (# LF shelf)	Open shelving w/1" lip, 12" deep (# LF shelf)	Open shelving w/1" lip, 24" deep (# LF shelf)	Transaction counter with ADA height area	Worksurface for 2 staff; storage below	Mailboxes w/ deep shelving below	Library shelving system	Instrument Storage Casework	Max LF Full height heavy duty shelving	Storage hooks per FF&E Space Type Diagram	Closet rod with shelving above	Half height lockers or cubbies per FFE Space Type	No special requirements	4'x4', # required	4'x6', # required	4'x8' with music staff lines, # required	4'x8', # required	No special requirements	4'x4', # required	4'x6', # required	4'x8', # required
Health Services																																																				
Reception / Waiting Room		x						x							x									8																				x					x			
School Nurse (School District Provided)																																																				
School Nurse Office & Treatment Room		x							x	x					x								3	8				6	8		x													x					x			
Cot Room		x							x	x					x						x																							x					x			
Restroom / Shower / Laundry			x									x					x	x			x																							x					x			
School Based Health Center (Outside Provider)																																																				
Health Care Provider / Nurse Practitioner		x						x							x						x																							x					x			
Mental Health Counselor Office/ & Conference Rm		x						x							x						x																							x					x			
Itinerant/ Shared Provider Office		x						x							x						x																							x					x			
Exam Room		x							x	x					x								3	8				6	8		x													x					x			
Lab		x							x	x								x					3	8				6	8		x													x					x			
Restroom			x									x					x				x																							x					x			
Administration & Counselling																																																				
Administration - Centralized																																																					
Reception & Waiting		x						x							x																				x									x					x			
Office Manager/ Secretary Area		x						x							x									10																				x					x			
Office Type 2MS: Attendance Office		x						x							x									6											x									x						1		
Office Type 2MS: Data Registrar per WSS 2020		x						x							x						x																							x						1		
Office Type 1MS: Principal / Ass't Principal		x						x							x						x																								1					1		
Ass't Principal Waiting / Supervision Area		x						x							x						x																							x					x			
Office Type 4MS or 5MS: Shared Office (single)		x						x							x						x																							x					x			
Office Type 6MS or 5MS: Shared Office (double)		x						x							x						x																							x					x			
Conference Room, Medium		x						x							x						x																											1		1		
Admin Workroom /Mail/ Kitchenette		x							x	x					x			x					3	6				6	6								x							x					x			
Records Storage	x										x				x						x																							x					x			
Closet/General Admin Storage	x										x				x																											x		x					x			
Patrol Closet	x										x				x																											x		x					x			
Restroom (aka Staff Toilets)			x									x					x				x																							x					x			

	SPECIALTIES & EQUIPMENT (cont.)																												DOORS, HARDWARE, WINDOWS																			
	Other Specialties																Appliances								Special Purpose (Owner Furnished)				Doors & Hardware																Windows			
																													Exterior				Interior															
ROOM / SPACE DESCRIPTION	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
Health Services																																																
Reception / Waiting Room	x																																x												x			
School Nurse (School District Provided)																																																
School Nurse Office & Treatment Room												x					x		x														x							x								x
Cot Room												x																					x															x
Restroom / Shower / Laundry	x																							x												x				x					x			
School Based Health Center (Outside Provider)																																																
Health Care Provider / Nurse Practitioner	x																																x							x								x
Mental Health Counselor Office/ & Conference Rm	x																																x							x					x			
Itinerant/ Shared Provider Office	x																																x							x					x			
Exam Room												x																					x												x			
Lab												x					x																x												x			
Restroom													x																							x				x					x			
Administration & Counselling																																																
Administration - Centralized																																																
Reception & Waiting	x																																x												x			
Office Manager/ Secretary Area	x																																									x			x			
Office Type 2MS: Attendance Office	x																																x							x			x		x			
Office Type 2MS: Data Registrar per WSS 2020	x																																x							x					x			
Office Type 1MS: Principal / Ass't Principal	x																																x							x							x	x
Ass't Principal Waiting / Supervision Area	x																																x												x			
Office Type 4MS or 5MS: Shared Office (single)	x																																x							x					x			
Office Type 6MS or 5MS: Shared Office (double)	x																																x							x					x			
Conference Room, Medium	x																																x							x					x			
Admin Workroom /Mail/ Kitchenette	x																	x				x											x												x			
Records Storage	x																																			x									x			
Closet/General Admin Storage	x																																			x									x			
Patrol Closet	x																																			x									x			
Restroom (aka Staff Toilets)	x																																			x				x					x			

	ELECTRICAL																																								
	Lighting					Electrical																	Technology/ Communications Infrastructure													Technology Owner Furnished					
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
Health Services																																									
Reception / Waiting Room	x					x																						x	x												
School Nurse (School District Provided)																																									
School Nurse Office & Treatment Room		x				x																						x	x												
Cot Room	x					x																	x																		
Restroom / Shower / Laundry	x																		x				x																		
School Based Health Center (Outside Provider)																																									
Health Care Provider / Nurse Practitioner	x					x																						x	x												
Mental Health Counselor Office/ & Conference Rm	x					x																						x	x												
Itinerant/ Shared Provider Office	x					x																						x	x												
Exam Room	x					x																						x	x												
Lab	x					x																	x																		
Restroom	x					x																	x																		
Administration & Counselling																																									
Administration - Centralized																																									
Reception & Waiting		x										x											x																x	x	
Office Manager/ Secretary Area	x					x																						x	x						x						
Office Type 2MS: Attendance Office	x					x																						x	x												
Office Type 2MS: Data Registrar per WSS 2020	x					x																						x	x												
Office Type 1MS: Principal / Ass't Principal		x				x																						x	x												
Ass't Principal Waiting / Supervision Area	x					x																	x																		
Office Type 4MS or 5MS: Shared Office (single)	x					x																						x	x												
Office Type 6MS or 5MS: Shared Office (double)	x					x																						x	x												
Conference Room, Medium	x										x																	x	x												
Admin Workroom /Mail/ Kitchenette	x															x												x	x												
Records Storage	x					x																	x																		
Closet/General Admin Storage	x					x																	x																		
Patrol Closet	x					x																	x																		
Restroom (aka Staff Toilets)	x					x																	x																		

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																		
	Plumbing																								HVAC/ Mechanical											
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
Health Services																																			
Reception / Waiting Room	x																						x												
School Nurse (School District Provided)																																			
School Nurse Office & Treatment Room		x																	x	x	x										x				
Cot Room																				x											x				
Restroom / Shower / Laundry					x										x	x	x			x										x	x				
School Based Health Center (Outside Provider)																																			
Health Care Provider / Nurse Practitioner	x																														x				
Mental Health Counselor Office/ & Conference Rm	x																						x												
Itinerant/ Shared Provider Office	x																						x												
Exam Room		x																													x				
Lab		x																													x				
Restroom					x										x					x			x								x				
Administration & Counselling																																			
Administration - Centralized						x																													
Reception & Waiting	x																						x												
Office Manager/ Secretary Area	x																						x												
Office Type 2MS: Attendance Office	x																						x												
Office Type 2MS: Data Registrar per WSS 2020	x																						x												
Office Type 1MS: Principal / Ass't Principal	x																						x												
Ass't Principal Waiting / Supervision Area	x																						x												
Office Type 4MS or 5MS: Shared Office (single)	x																						x												
Office Type 6MS or 5MS: Shared Office (double)	x																						x												
Conference Room, Medium	x																						x												
Admin Workroom /Mail/ Kitchenette		x																									x								
Records Storage	x																						x												
Closet/General Admin Storage	x																						x												
Patrol Closet	x																						x												
Restroom (aka Staff Toilets)					x										x					x		x	x												

ROOM / SPACE DESCRIPTION	FINISHES: Ceiling: No special requirements	Ceiling: Acoustical ceiling	Ceiling: Moisture resistant ceiling/GWB	Ceiling: Acoustical treatment may be needed	Ceiling: Painted exposed structure and MEP/FP	Floors: No special requirements	Floors: Per program requirements	Floors: Carpet	Floors: Resilient flooring	Floors: Concrete - polished	Floors: Concrete - sealed	Floors: Tile	Floors: Wood	Floors: Walk-off carpet or mats	Walls: No special requirements - paint	Walls: Avoid paint on walls - natural finishes	Walls: Ceramic tile	Walls: Moisture resistant surfaces	Walls: Wall-mounted acoustical panels (above 8 ft)	Walls: Operable Wall	CASEWORK: No special requirements	CASEWORK: Per program requirements & FFE Space Type	CASEWORK: Tall cabinets	CASEWORK: Plastic laminate (p-lam) countertop (# LF)	CASEWORK: Chemical resistant p-lam countertop (# LF)	CASEWORK: Heavy duty workcounter	CASEWORK: 30"d x8'-0" l workbench	CASEWORK: Lower cabinets (# LF)	CASEWORK: Upper cabinets (# LF)	CASEWORK: Wardrobe (lockable)	CASEWORK: Lockable cabinets	CASEWORK: Open base cabinets w/1" lip (# LF shelf)	CASEWORK: Open shelving w/1" lip, 12" deep (# LF shelf)	CASEWORK: Open shelving w/1" lip, 24" deep (# LF shelf)	CASEWORK: Transaction counter with ADA height area	CASEWORK: Worksurface for 2 staff, storage below	CASEWORK: Mailboxes w/ deep shelving below	CASEWORK: Library shelving system	CASEWORK: Instrument Storage Casework	CASEWORK: Max LF Full height heavy duty shelving	CASEWORK: Storage hooks per FF&E Space Type Diagram	CASEWORK: Closet rod with shelving above	CASEWORK: Half height lockers or cubbies per FFE Space Type	SPECIALTIES & EQUIPMENT: Whiteboard (Quantity): No special requirements	Whiteboard (Quantity): 4'x4', # required	Whiteboard (Quantity): 4'x6', # required	Whiteboard (Quantity): 4'x8' with music staff lines, # required	Whiteboard (Quantity): 4'x8', # required	Tackboard (Quantity): No special requirements	Tackboard (Quantity): 4'x4', # required	Tackboard (Quantity): 4'x6', # required	Tackboard (Quantity): 4'x8', # required
Administration & Counselling (cont.)																																																		
Admin/Counseling Services - Distributed																																																		
Waiting/Supervision Area		x						x							x						x																											
Office Type 1MS: Ass't Principal / House Admin		x						x							x						x																							1				1			
Office Type 2MS: Counselor Office		x						x							x						x																							1				1			
Conference Room, Small		x						x							x						x																										1		1			
Meditation Room		x						x							x						x																							x							
Distributed Resources																																																		
Office Type 4MS or 5MS: Itinerant Staff (single)		x						x							x						x																							x				x			
Office Type 5MS: Shared Office (double occupant)		x						x							x						x																							x				x			
Office Type 3MS: Security Office		x						x							x						x																							x				x			
Distributed Resources - General Access																																																		
Staff Lounge		x							x	x					x			x				x		24				20	8															1				1			
Staff Work Room		x							x	x					x			x				x		10				8	8															1				1			
Family & Community Partner Support																																																		
Family Engagement Suite																																																		
Family Engagement Room		x						x							x							x		6				6	6															1				1			
Shower/Changing/Toilet Room			x						x	x		x					x	x			x																							x				x			
Clothing/Backpack/School Supplies Storage	x								x	x					x							x																							x				x			
PTA/ Volunteer Storage	x										x				x						x																							x				x			
Family Support Office/Conference Room		x						x							x						x																							1				1			
Community Partner Offices		x						x							x						x																							1				1			
Community Partners Conference/Workroom		x						x							x									6				6	6																		1				1

ROOM / SPACE DESCRIPTION	SPECIALTIES & EQUIPMENT (cont.)																															DOORS, HARDWARE, WINDOWS																				
	Other Specialties																			Appliances								Special Purpose (Owner Furnished)				Doors & Hardware																				Windows				
																																Exterior				Interior																
	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
Administration & Counselling (cont.)																																																			
Admin/Counseling Services - Distributed																																																		
Waiting/Supervision Area	x																																																	
Office Type 1MS: Ass't Principal / House Admin	x																																																	
Office Type 2MS: Counselor Office	x																																																	
Conference Room, Small	x																																																	
Meditation Room	x																																																	
Distributed Resources																																																		
Office Type 4MS or 5MS: Itinerant Staff (single)	x																																																	
Office Type 5MS: Shared Office (double occupant)	x																																																	
Office Type 3MS: Security Office	x																																																	
Distributed Resources - General Access																																																		
Staff Lounge	x																2			x	x	3	2																												
Staff Work Room	x																					x																												
Family & Community Partner Support																																																		
Family Engagement Suite																																																		
Family Engagement Room			x																																															
Shower/Changing/Toilet Room	x																																																	
Clothing/Backpack/School Supplies Storage	x																																																	
PTA/ Volunteer Storage	x																																																	
Family Support Office/Conference Room	x																																																	
Community Partner Offices	x																																																	
Community Partners Conference/Workroom	x																																																	

	ELECTRICAL																																								
	Lighting					Electrical																	Technology/ Communications Infrastructure													Technology Owner Furnished					
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
Administration & Counselling (cont.)																																									
Admin/Counseling Services - Distributed																																									
Waiting/Supervision Area	x					x																																			
Office Type 1MS: Ass't Principal / House Admin		x				x																						x	x												
Office Type 2MS: Counselor Office	x					x																						x	x												
Conference Room, Small	x										x																	x	x												
Meditation Room	x					x																						x													
Distributed Resources																																									
Office Type 4MS or 5MS: Itinerant Staff (single)	x					x																						x	x												
Office Type 5MS: Shared Office (double occupant)	x					x																						x	x												
Office Type 3MS: Security Office	x					x																						x	x					x							
Distributed Resources - General Access																																									
Staff Lounge		x																	x									x	x												
Staff Work Room	x															x												x	x												
Family & Community Partner Support																																									
Family Engagement Suite																																									
Family Engagement Room		x					x																					x	x												
Shower/Changing/Toilet Room	x					x																	x																		
Clothing/Backpack/School Supplies Storage	x					x																	x																		
PTA/ Volunteer Storage	x					x																						x	x												
Family Support Office/Conference Room	x					x					x																	x	x												
Community Partner Offices	x					x																						x	x												
Community Partners Conference/Workroom	x					x					x																	x	x												

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																	
	Plumbing																									HVAC/ Mechanical									
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
Administration & Counselling (cont.)																																		
Admin/Counseling Services - Distributed																																		
Waiting/Supervision Area	x																						x											
Office Type 1MS: Ass't Principal / House Admin	x																						x											
Office Type 2MS: Counselor Office	x																						x											
Conference Room, Small	x																						x											
Meditation Room	x																						x											
Distributed Resources																																		
Office Type 4MS or 5MS: Itinerant Staff (single)	x																						x											
Office Type 5MS: Shared Office (double occupant)	x																						x											
Office Type 3MS: Security Office	x																						x											
Distributed Resources - General Access																																		
Staff Lounge		x																x	x					x										
Staff Work Room		x	x																								x							
Family & Community Partner Support																																	x	
Family Engagement Suite																																		
Family Engagement Room		x																					x											
Shower/Changing/Toilet Room					x										x	x				x		x	x											
Clothing/Backpack/School Supplies Storage	x																						x											
PTA/ Volunteer Storage	x																						x											
Family Support Office/Conference Room	x																						x											
Community Partner Offices	x																						x											
Community Partners Conference/Workroom		x																					x											

ROOM / SPACE DESCRIPTION	FINISHES: Ceiling: No special requirements	Acoustical ceiling	Moisture resistant ceiling/GWB	Acoustical treatment may be needed	Painted exposed structure and MEP/FP	Floors: No special requirements	Per program requirements	Carpet	Resilient flooring	Concrete - polished	Concrete - sealed	Tile	Wood	Walk-off carpet or mats	Walls: No special requirements - paint	Avoid paint on walls - natural finishes	Ceramic tile	Moisture resistant surfaces	Wall-mounted acoustical panels (above 8 ft)	Operable Wall	CASEWORK: No special requirements	Per program requirements & FFE Space Type	Tall cabinets	Plastic laminate (p-lam) countertop (# LF)	Chemical resistant p-lam countertop (# LF)	Heavy duty workcounter	30"d x8'-0" l workbench	Lower cabinets (# LF)	Upper cabinets (# LF)	Wardrobe (lockable)	Lockable cabinets	Open base cabinets w/1" lip (# LF shelf)	Open shelving w/1" lip, 12" deep (# LF shelf)	Open shelving w/1" lip, 24" deep (# LF shelf)	Transaction counter with ADA height area	Worksurface for 2 staff, storage below	Mailboxes w/ deep shelving below	Library shelving system	Instrument Storage Casework	Max LF Full height heavy duty shelving	Storage hooks per FF&E Space Type Diagram	Closet rod with shelving above	Half height lockers or cubbies per FFE Space Type	SPECIALTIES & EQUIPMENT: Whiteboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8' with music staff lines, # required	4'x8', # required	Tackboard (Quantity): No special requirements	4'x4', # required	4'x6', # required	4'x8', # required
Building Support																																																					
General Support																																																					
Central Receiving/Storage/Workroom/Break Rm					x						x			x				x						8				8	8																		1						1			
Loading Dock (shared with food service)																					x																										x					x			
Lead Custodian Office		x							x						x						x																										x					x			
Equipment Storage Room	x										x				x						x																										x					x			
Furniture Storage Room	x										x				x						x																										x					x			
Facilities / Grounds Equip Storage					x						x				x						x																										x					x			
MDF Room	x										x				x						x																										x					x			
IDF & Other Telecom / Data Rooms	x										x				x						x																										x					x			
Non-Assignable Support Areas																																																					
Custodial Staff Toilet/Locker/Showers			x									x					x	x			x																										x								
Custodial Closets					x						x						x	x			x																																		
Boiler Room	x										x				x						x																										x					x			
Mechanical Rooms (occupied floors)	x										x				x						x																										x					x			
Mechanical Rooms (unoccupied floors)	x										x				x						x																										x					x			
Electrical Rooms (Main + satellite closets)	x										x				x						x																										x					x			
Circulation		x							x	x				x	x						x																										x					As appropriate			

ROOM / SPACE DESCRIPTION	SPECIALTIES & EQUIPMENT (cont.)																															DOORS, HARDWARE, WINDOWS																					
	Other Specialties																			Appliances								Special Purpose (Owner Furnished)				Doors & Hardware																				Windows				
																																Exterior				Interior																	
	No special requirements	Per program requirements & FFE Space Types	Lockers	Changing room benches	Wall padding behind basketball hoops	Climbing wall with security cage	Ceiling mounted divider curtain	Retractable basketball goals	Scoreboards and shot clocks	Stage rigging per Technical Bldg Standards	Side & rear curtains per FFE Space Type	Privacy curtains at each cot or shower	Specimen cabinet (to Lab)	Flammable material storage cabinet (OFCI per FFE)	Stainless steel shelf & mop catcher	Bleacher seating	Refrigerator with freezer, undercounter	Refrigerator with freezer, full size	Icemaker, undercounter (CFCI)	Range (CFCI)	Range Hood, Type II if permitted (CFCI)	Microwave oven	Dishwasher - 140F sanitation capable (CFCI)	Stackable Washer/Dryer (CFCI)	Kiln (OFCI)	Pottery wheels (OFCI)	Wall Mounted Key Cabinet (provide blocking)	Future Trash Compactor	Door with vision panel and sidelite	Double doors with vision panel & sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	Door with sidelite OR vision panel	Double doors with vision panel & sidelite	Double doors with vision panel, no sidelite	Solid Door, no sidelite	Double solid Door, no sidelite	42" wide door, open 180 degrees	Door with sliding window & key return slot	Coat hook	One door in, one door out	Separation, but no door	Roll-down counter door	Roll-down grille	No special requirements	Windows - exterior/operable	Windows - exterior	Interior window
Building Support																																																			
General Support																																																			
Central Receiving/Storage/Workroom/Break Rm	x																x				x																													
Loading Dock (shared with food service)	x																									x																								
Lead Custodian Office																										x																								x
Equipment Storage Room	x																																																
Furniture Storage Room	x																																																
Facilities / Grounds Equip Storage														x																																				
MDF Room	x																																																
IDF & Other Telecom / Data Rooms	x																																																
Non-Assignable Support Areas																																																	
Custodial Staff Toilet/Locker/Showers			x																																														
Custodial Closets		x													x																																			
Boiler Room	x																																																
Mechanical Rooms (occupied floors)	x																																																
Mechanical Rooms (unoccupied floors)	x																																																
Electrical Rooms (Main + satellite closets)	x																																																
Circulation			x																																														

	ELECTRICAL																																									
	Lighting					Electrical																	Technology/ Communications Infrastructure													Technology Owner Furnished					
ROOM / SPACE DESCRIPTION	No special requirements	Natural lighting	Shatterproof lighting (w/ protective cover)	Makeup lighting	Stage lighting	No special requirements	Per program requirements & FFE Space Type	Front Row Audio (CFCI)	LED Projector: wall mtd (OFCI)	Large Group Presentation Projector	Wall-mounted monitor	Wall-mounted digital information screen	Overhead retractable reel	Power for 12 pottery wheels	Power for 3D printer	Dedicated circuit for large volume copier	Power for modular sound-isolation rooms	Power for 2 vending machines (OFOI)	220 V power for appliance	Power located for changing table	Rough-in for trash compactor	Connections for scoreboard and time clocks	No special requirements	Per program requirements & FFE Space Type	Data Ports at wall per Tech Standards	Countertop data ports per program description	Data ports in floor for point-of-sale	Intercom w/ speaker & volume ctrl	VOIP Telephone, software integration w/ Intercom System	Connection for PA system w/ wireless mics	Performance Sound System	Card access system	Security cameras per site-specific layout	Security system camera viewing station	Push-button lockdown system	LED projector: cart mounted	Portable sound system	POS workstation carts	Defibrillator	Vestibule security camera/intercom Aiphone	Security cameras per site-specific layout
Building Support																																										
General Support																																										
Central Receiving/Storage/Workroom/Break Rm	x					x																						x	x			x									
Loading Dock (shared with food service)																					x																					
Lead Custodian Office	x					x																						x	x													
Equipment Storage Room	x					x																	x																			
Furniture Storage Room	x					x																	x																			
Facilities / Grounds Equip Storage	x					x																	x																			
MDF Room	x					x																	x																			
IDF & Other Telecom / Data Rooms	x					x																	x																			
Non-Assignable Support Areas																																										
Custodial Staff Toilet/Locker/Showers	x					x																	x																			
Custodial Closets	x					x																	x																			
Boiler Room	x					x																						x	x													
Mechanical Rooms (occupied floors)	x					x																						x														
Mechanical Rooms (unoccupied floors)	x					x																						x														
Electrical Rooms (Main + satellite closets)	x					x																						x														
Circulation																												x														

SPACE FEATURES TABLE

ROOM / SPACE DESCRIPTION	PLUMBING & HVAC/MECHANICAL																																		
	Plumbing																								HVAC/ Mechanical												
	No special requirements	Sink without bubbler	2 compartment sink	3 compartment sink	Single wall mounted handwashing sink	Multi-faucet handwashing station nearby	Large deep sink, no bubbler	Large deep art sink with clay trap	Floor sink with clay trap	Deep utility sink	Mop sink	Floor sink with 8" integral rim	Drinking fountain with bottle filler	Connected restroom w/ sink/toilet	Toilet	Shower	Connection for washer	Connection for dishwasher	Connection for Icemaker	Floor drain	Eyewash at sink	Hose bibb	Hose bibb, hot and cold water	No special requirements	Exhaust hood for cooking (Type 2 if permitted)	Venting for kilns (2 each)	Ventilation for 3D printer	Ventilation for copier	Ventilation for flammable storage cabinet	Unconditioned space with ventilation	Connection for dryer venting	Exhaust all air to exterior	Individual ventilation system with A/C	Independent zoning for after-hours use	Ducting for Future Fume Hood
Building Support																																			
General Support																																			
Central Receiving/Storage/Workroom/Break Rm		x								x										x	x			x											
Loading Dock (shared with food service)	x																						x	x											
Lead Custodian Office	x																							x											
Equipment Storage Room	x																							x											
Furniture Storage Room	x																							x											
Facilities / Grounds Equip Storage	x																												x	x					
MDF Room	x																																x		
IDF & Other Telecom / Data Rooms	x																							x											
Non-Assignable Support Areas																																			
Custodial Staff Toilet/Locker/Showers											x				x	x				x				x											
Custodial Closets											x													x											
Boiler Room												x										x		x											
Mechanical Rooms (occupied floors)												x										x		x											
Mechanical Rooms (unoccupied floors)												x										x		x											
Electrical Rooms (Main + satellite closets)	x																							x											
Circulation	x																																		

Alternate Capacity Model for High Needs Middle Schools

SPS Capital Planning will make a determination, based upon a review of a school's enrollment, capacity, equity tier, master schedule, quantities of grant funding sources and community partners, and other factors, as to whether a project should utilize this High Needs Capacity Model for its Educational Specifications.

Observations from a Comparison of SPS Middle Schools

As noted in the section "What Do We Know: Where We Are Now", a comparison of SPS comprehensive middle schools noted significant variability among them, including demographics, the types and sizes of classes offered, and how their programs utilize the buildings they currently occupy.

Some Schools Need More Teaching Stations to Accommodate Smaller Class Sizes:

Some of the middle schools that are near the assumed 1,000-student enrollment capacity have class sizes that align with the expectation of 30 students in General Education and Science classrooms (Jane Addams, Hamilton), while other schools with higher needs have class sizes, as well as classroom utilization rates, that are significantly smaller (Aki Kurose, Denny & Mercer).

The Post-Occupancy Debrief for Denny Middle School also pointed out this difference. The principal noted:

> *"Though the classroom spaces were planned around the 30:1 ratio for middle schools, there are many programs with smaller class sizes than that. This results in the school running out of space because they do not have enough teaching stations to accommodate all the smaller classes and groupings."*

A review of master schedules confirmed that schools in lower equity tiers need more teaching stations.

Further analysis showed that the percentage of students served in bilingual education ranges from a low of 2 to 4% at five middle schools (Hamilton, Madison, Eckstein, McClure, and Whitman) to a high of 18-19% at Denny & Mercer and 25% at Aki Kurose. Bilingual education class sizes are often smaller, requiring additional classrooms to accommodate a 1,000-student enrollment capacity.

RECOMMENDATION: To provide more Teaching Stations, this High Needs Capacity Model includes the addition of four full-size and six half-size Flex Classrooms that can accommodate smaller sections of various programs.

Some Schools Need More Classrooms to Deliver More Special Education Services

The percentage of students provided with Special Education services ranges from a low of 10% at Hamilton to a high of 20% at Denny, with schools such as Mercer, Aki Kurose & Washington ranging from 12-15%.

Special education class sizes are typically smaller, ranging from 7 students in an Intensive Services delivery model to 22 students in a Resource delivery model.

RECOMMENDATION: To provide more space for the delivery of Special Education services, this High Needs Capacity Model includes the addition of two more full-size classrooms for Moderate Intensive or Intensive Services delivery, and two more half-size classrooms for Resource or Access services delivery, for a total of up to nine teaching stations for delivery of Special Education services.

Additional Classrooms Require Additional Small Group Breakout Spaces for MTSS

For each additional pair of classrooms, an additional breakout space is proposed as follows:

General Education Classrooms:	Included in district-wide model
Additional Flex Classrooms (full size)	4
Additional Flex Classrooms (half size)	6
Science Classrooms	Included in district-wide model
World Language Classrooms	Included in district-wide model
Additional General Education Classrooms to be served:	**10**

Additional "Breakout" Spaces	
Neighborhood Learning Commons	Included in district-wide model
Small Group Collaboration Rooms (Tier 2 services - up to 8 people)	1
MTSS Breakout Rooms (Tier 3 services - up to 4 people)	4
TOTAL Additional "Breakout" Spaces:	**5**

Some Schools Have More Community Partners or Higher Percentages of Families Experiencing Homelessness

For schools with these additional partners or families that are being served, a larger Family Engagement Room and an additional Community Partner office are recommended. See Program Area Summary for specifics.

Analysis of Demographics, Master Schedules and Classroom Utilization Rates

These substantial increases in teaching stations and square footage may not be necessary for schools that align more closely in their class sizes with the capacity model assumed in this District-wide Educational Specification. It is recommended that a detailed analysis of master schedules and classroom utilization rates be conducted for middle schools under consideration for a major capital project before these Educational Specifications would be assumed to apply.

REV 5/14/2021

MIDDLE SCHOOL ED SPEC CAPACITY MODEL			High Needs		
Nbhd Program Area	# Students	# T.S.	Calculated Capacity per Space Type	Capacity @ 100% Utilization	Capacity Totals @ 83% Utilization (6 pds/day)
General Education					
Core Academic (English, Math, Social Studies)	30	24	720		
Flex Classrooms, Full Size	30	3	90		
Flex Classrooms, Half Size	15	6	90		
Science Classroom/Labs	30	6	180		
World Language	30	3	90		
General Education - Subtotal		**42**	>>>	**1,170**	**971**
Special Education	*# Students based upon WSS and CBA*				
Classroom: Resource Services	22	3	66		
Classroom: Access Services	13	1	13		
Classroom: Social/Emotional Services	10	1	10		
Classroom: Moderate Intensive Services	9	2	18		
Classroom: Intensive Services	7	2	14		
Special Education - Subtotal		**9**	>>>	**121**	**100**
Career & Technical Education					
STEM Innovation Lab	25	1	25		
CTE: Computer Science	25	1	25		
School-Wide Flex Adjacent Library*	30	2	60		
Career & Technical Education - Subtotal		**2**	>>>	**110**	**91**
Arts					
Visual Arts Classroom	30	1	30		
Performing Arts Classrooms	45	2	90		
Stage (Drama Classroom)	0	1	0		
Visual & Performing Arts - Subtotal		**4**	>>>	**120**	**100**
Physical Education					
Physical Education, Main Gym	25	2	50		
Physical Education, Fitness Room	25	1	25		
Physical Education - Subtotal		**3**	>>>	**75**	**62**
TOTAL STUDENT CAPACITY		**60**		**1,596**	**1,325**

Stage is counted as a T.S. but not assigned capacity because few MS have drama pgms.

SpEd is included in Capacity Calculations for secondary schools because they're schedule-based.

Target enrollment is 900 students for middle schools with 1000-seat capacity.

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
General Education	**Academic Neighborhoods**								
	General Education Classrooms	24	24	900	21,600	24	24	900	21,600
	Flex Classroom, Full Size	1	1	900	900	3	3	900	2,700
	Flex Classroom, Half Size	-	-	-	-	6	6	450	2,700
	Science Classroom/Universal Lab	6	6	1,350	8,100	6	6	1,350	8,100
	Shared Science Prep & Storage	-	3	300	900	-	3	300	900
	Neighborhood Learning Commons	-	6	600	3,600	-	6	600	3,600
	Small Group Collaboration Rooms	-	6	200	1,200	-	6	200	1,200
	Display	-	6	50	300	-	6	50	300
	Book & Technology Storage	-	6	100	600	-	6	100	600
	Other General Education Classrooms								
	World Language	3	3	900	2,700	3	3	900	2,700
	Teaching Kitchen *	-	-	-	-	-	-	-	-
	School-wide Resources								
	Small Group Collaboration Rooms - Distributed	-	1	200	200	-	2	200	400
	MTSS Breakout Rooms - Distributed	-	4	120	480	-	8	120	960
	Student Lockers (includes added hallway width to access lockers)	-	1	Allowance	1,800	-	1	Allowance	1,800
	Central Science Kit Storage	-	1	260		-	1	260	260
	Required Subtotal	**34**			**42,380**	**42**			**47,820**
Special Education	Classroom – Resource Services	1	1	450	450	Up to 3	Up to 3	450	1,350
	Classroom – Access Services	1	1	450	450	1	1	450	450
	Classroom - Social/Emotional Learning (SEL)	1	1	900	900	1	1	900	900
	Classroom – Moderate Intensive Services	1	1	900	900	2	2	900	1,800
	Classroom – Intensive Services	1	1	1,000	1,000	2	2	1,000	2,000
	Teaching Kitchen*	-	Zone	**	**	-	Zone	**	**
	Shared Toilet Room with Changing Table - adjacent to Intensive Services	-	1	150	150	-	1	150	150
	Shared Toilet Room with Changing Table - adjacent to Moderate Intensive	-	-	-	-	-	1	150	150
	OT/PT Room with Integrated Storage	-	1	600	600	-	1	600	600
	Speech/Language Pathologist Office, Psychologist Office	-	2	120	240	-	2	120	240
	Required Subtotal	**5**			**4,690**	**9**			**7,640**

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
CTE	Universal Lab	2	2	1,350	2,700	2	2	1,350	2,700
	Prep/Storage Space	-	2	150	300	-	2	150	300
	Sci/Engrg/Industry Project Lab with Storage	-	-	-	-	-	-	-	-
	Required Subtotal	**2**			**3,000**	**2**			**3,000**
Visual and Performing Arts	**Visual Arts**								
	Visual Arts Classroom	1	1	1,350	1,350	1	1	1,350	1,350
	Arts Supply & Project Storage	-	1	300	300	-	1	300	300
	Kiln Room	-	1	150	150	-	1	150	150
	Future Digital Arts Classroom **	-	-	-	-	-	-	-	-
	Performing Arts								
	Performing Arts Practice Room A / Choral & Orchestra	1	1	1,600	1,600	1	1	1,600	1,600
	Performing Arts Practice Room B / Band	1	1	2,000	2,000	1	1	2,000	2,000
	Instrument Storage Room - Band	-	1	400	400	-	1	400	400
	Shared Storage (music stands, chairs)	-	1	400	400	-	1	400	400
	Music, Practice Room - Ensemble / Mixing	-	1	300	300	-	1	300	300
	Music, Practice Room - Small	-	4	75	300	-	4	75	300
	Music, Shared Library	-	1	150	150	-	1	150	150
	Required Subtotal	**3**			**6,950**	**3**			**6,950**
Physical Education and Athletics	Main Gymnasium	2	2 sides	4,250	8,500	2	2 sides	4,250	8,500
	Fitness Room	1	1	2,400	2,400	1	1	2,400	2,400
	Health Classroom	-	-	-	-	-	-	-	-
	PE & Athletics, Student Lockers/Changing	-	2	1,250	2,500	-	2	1,250	2,500
	PE & Athletics, Student Showers/Toilet	-	2	150	300	-	2	150	300
	Staff & All-Gender Toilet/Changing/Shower Rooms	-	2	130	260	-	2	130	260
	PE Staff Office & Lockers	-	2	150	300	-	2	150	300
	PE Staff Showers/Toilet	-	2	85	170	-	2	85	170
	PE Equipment Storage	-	1	350	350	-	1	350	350
	Athletics Equipment & Uniform Storage	-	1	350	350	-	1	350	350
	Community Partner Storage at Gym	-	1	300	300	-	1	300	300
	Outdoor Equipment Storage, PE & Athletics (unheated)	-	1	120	120	-	1	120	120
	Required Subtotal	**3**			**15,550**	**3**			**15,550**

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
Library and Technology Services	Library: Group Instruction, Reading, Circulation, Stacks	-	1	4,500	4,500	-	1	4,500	4,500
	Workroom (formerly Lib office was separate)	-	1	250	250	-	1	250	250
	Computer Lab	-	-	-	-	-	-	-	-
	School-wide Flex Classrooms, or optional makerspace	-	-	-	-	Up to 2	Up to 2	900	1,800
	Conference Room, Medium	-	1	180	180	-	1	180	180
	Conference Room, Small	-	3	120	360	-	3	120	360
	Information Technology Support (former Computer Storage/Repair)	-	1	200	200	-	1	200	200
	Technology Equipment Storage	-	1	150	150	-	1	150	150
	Restrooms	-	-	-	-	-	-	-	-
	Required Subtotal	**2**			**5,640**	**2**			**7,440**
Dining Commons and Stage	**Commons**								
	Student Commons/Dining Area (includes thrust stage)	-	1	7,480	7,480	-	1	7,480	7,480
	Vending machine/Grab & Go Niches, and Handwashing Stations ***	-	1	included above		-	1	included above	
	Kitchenette for Community Use, SpEd Life Skills, & World Language		1	320	320		1	320	320
	Pantry (for supporting Homelessness)	-	1	included in Commons above		-	1	included in Commons above	
	Stage	1	1	2,600	2,600	1	1	2,600	2,600
	Performing Arts Storage	-	1	200	200	-	1	200	200
	Dedicated restroom/changing rooms & makeup area	-	2	200	400	-	2	200	400
	Kitchen								
	Kitchen, includes receiving, food prep, scullery	-	1	1,100	1,100	-	1	1,100	1,100
	Walk-in cooler	-	1	200	200	-	1	200	200
	Walk-in freezer	-	1	200	200	-	1	200	200
	Dry storage	-	1	350	350	-	1	350	350
	Manager's office	-	1	140	140	-	1	140	140
	Nutrition Services Laundry / soap storage	-	1	70	70	-	1	70	70
	Servery	-	1	800	800	-	1	800	800
	Adult (kitchen staff) toilet/lockers	-	2	50	100	-	2	50	100
	Required Subtotal	**1**			**13,960**	**1**			**13,960**

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
Health Services	Waiting/Reception (shared)	-	1	220	220	-	1	220	220
	School Nurse (District provider)								
	School Nurse Office & Treatment Room	-	1	180	180	-	1	180	180
	Cot Room (2 cots)	-	1	120	120	-	1	120	120
	Toilet Room w/ shower, washer & dryer	-	1	120	120	-	1	120	120
	School Based Health Center (Outside Provider)								
	Health Care Provider Office / Conference Rm	-	1	120	120	-	1	120	120
	Mental Health Counselor Office	-	1	120	120	-	1	120	120
	Counseling Room	-	1	150	150	-	1	150	150
	Itinerant/Shared Provider Office	-	1	120	120	-	1	120	120
	Exam Room	-	1	100	100	-	1	100	100
	Lab	-	1	150	150	-	1	150	150
	Toilet Room	-	1	50	50	-	1	50	50
	Required Subtotal	**0**			**1,450**	**0**			**1,450**
Administration and Counseling Services	**Administration - Centralized**								
	Public Reception & Waiting	-	1	500	500	-	1	500	500
	Office Manager/Secretary/Support	-	1	200	200	-	1	200	200
	Office Type 2MS: Attendance Office	-	1	150	150	-	1	150	150
	Office Type 2MS: Registrar Office	-	1	150	150	-	1	150	150
	Office Type 1MS: Principal, Ass't Principal or House Administrator	-	2	180	360	-	2	180	360
	Office Type 4MS or 5MS: Shared Office (single occupant)	-	1	120	120	-	1	120	120
	Office Type 6MS: Shared (Itinerant) Offices (double occupant)	-	1	120	120	-	1	120	120
	Asst Principal/House Administrator Waiting/Supervision	-	1	30	30	-	1	30	30
	Conference Room, Medium	-	1	180	180	-	1	180	180
	Administration Workroom (Includes: Copy, Mail, Kitchenette)	-	1	220	220	-	1	220	220
	Records/Secure Storage	-	1	180	180	-	1	180	180
	Closet/General Admin Storage	-	1	120	120	-	1	120	120
	Patrol Closet	-	1	30	30	-	1	30	30
	Book Storage Room	-	-	-	-	-	-	-	-
	Staff Toilets	-	2	50	100	-	2	50	100
	Admin/Counseling Services - Distributed								
	Waiting/Supervision Area	-	3	30	90	-	3	30	90
	Asst Principal or House Administrator	-	3	150	450	-	3	150	450
	Office Type 2MS: Counselor Office	-	3	150	450	-	3	150	450
	Conference Room, Small	-	3	120	360	-	3	120	360

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
Administration and Counseling Services (cont.)	Meditation Room	-	2	80	160	-	2	80	160
	Distributed Resources								
	Office Type 4MS or 5MS: Shared (Itinerant) Office (single occupant)	-	1	120	120	-	2	120	240
	Office Type 5MS: Shared (Itinerant) Offices (double occupant)	-	1	120	120	-	2	120	240
	Office Type 3MS: Security Office	-	1	150	150	-	1	150	150
	Distributed Resources - General Access								
	Staff Lounge	-	1	900	900	-	1	900	900
	Staff Workrooms	-	3	180	540	-	3	180	540
Family & Community Partner Support	**Community & Family Engagement Suite**								
	Family Engagement Room	-	1	900	900	-	1	1,200	1,200
	Shower/Changing Room	-	1	65	65	-	1	65	65
	Toilet - All Gender, Minimum Two Stalls	-	1	120	120	-	1	120	120
	Clothing & Backpack Storage	-	1	100	100	-	1	100	100
	School Supplies Storage	-	1	20	20	-	1	20	20
	PTA/Volunteer Storage	-	1	100	100	-	1	100	100
	Family Support Office/Conference Room	-	1	120	120	-	1	120	120
	Community Partner Suite - Conference/Workroom	-	1	240	240	-	1	240	240
	Community Partner Suite - Offices	-	2	120	240	-	3	120	360
General Support	Central Receiving / Storage / Workroom / Break Room	-	1	600	600	-	1	600	600
	Lead Custodian Office	-	1	100	100	-	1	100	100
	Equipment Storage (allowance)	-	2	400	800	-	2	400	800
	Furniture Storage (allowance)	-	1	400	400	-	1	400	400
	Facilities & Grounds Storage	-	1	150	150	-	1	150	150
	MDF Room	-	1	300	300	-	1	300	300
	IDF & Other Telecom/Data Rooms	-	3	130	390	-	3	130	390
	TOTAL TEACHING STATIONS	**50**				**62**			
	BUILDING ASSIGNABLE SF SUBTOTAL				**104,065**				**114,915**

	Space Description	2021 Proposed Middle School Ed Spec District-Wide Capacity Model # T.S.	# Rooms	Unit SF	Total SF	2021 Draft Middle School Ed Spec High Needs School Capacity Model # T.S.	# Rooms	Unit SF	Total SF
Non-Assignable Areas (per OSPI)	Staff Toilet/Lockers/Shower	-	2	80	160	-	2	80	160
	Custodial Closet (distributed throughout)	-	7	80	560	-	7	80	560
	Boiler Room	-	1	1,000	1,000	-	1	1,000	1,000
	Mechanical Rooms (occupied floors)	-	allowance	9,000	9,000	-	allowance	9,000	9,000
	Mechanical Rooms (unoccupied floors)	-	allowance	5,000	5,000	-	allowance	5,000	5,000
	Electrical Rooms (main electrical room + satellite closets)	-	allowance	1,000	1,000	-	allowance	1,000	1,000
	Circulation, Gen'l Purpose Toilet Rms, & Interior/Exterior Walls/Structure	***		37%	38,504	***		37%	42,519
	Required Subtotal				**55,224**				**59,239**
	TOTAL BUILDING GSF				**159,289**				**174,154**

* Co-locate with Community Kitchenette

** Future Digital Arts Classroom is accounted for within the General Education Classrooms

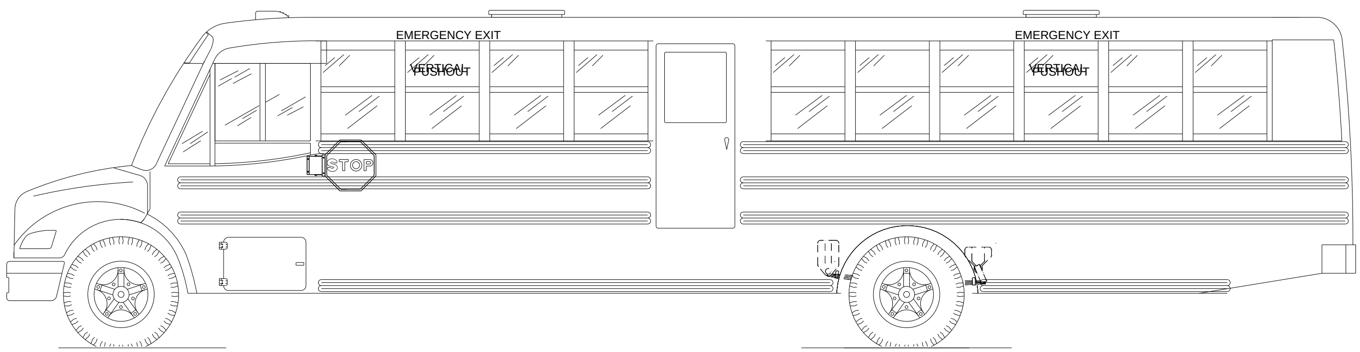
*** Increased for adequate circulation + energy code wall thickness

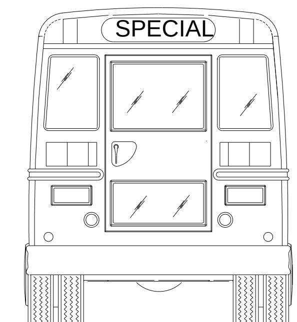
***** Located just outside Commons but included in SF allowance

CAD DRAWING - DO NOT MAKE MANUAL CHANGES

Appendix C

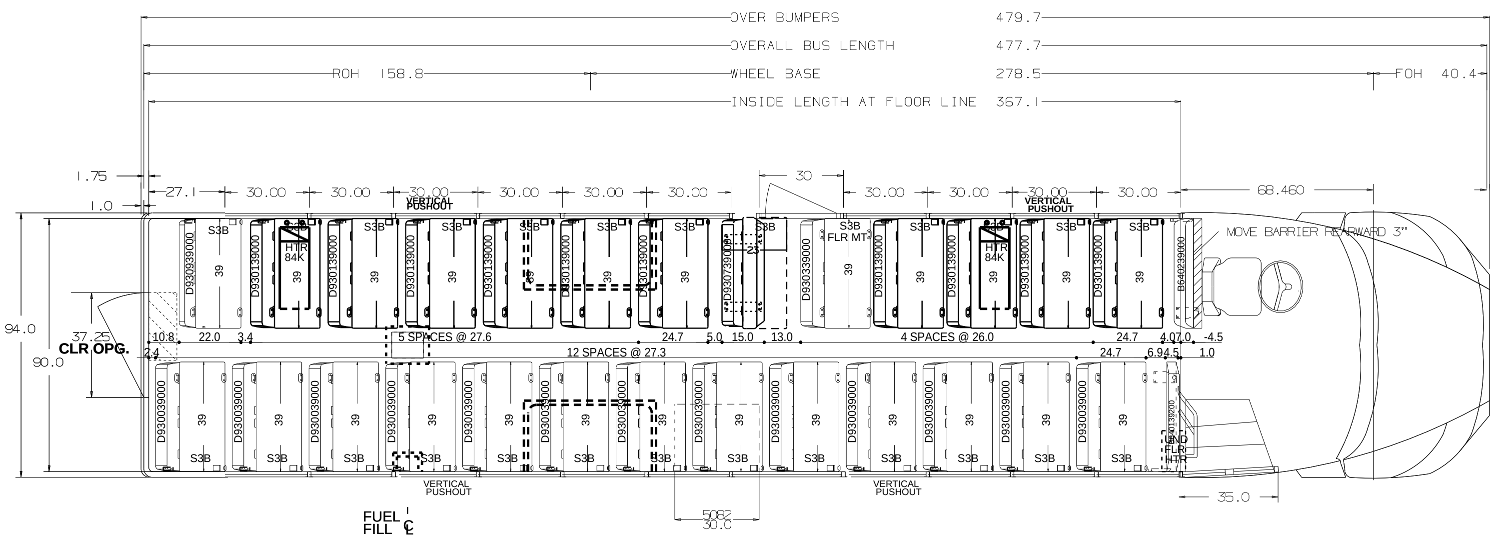
SEATING CAPACITY: 78 + DRIVER

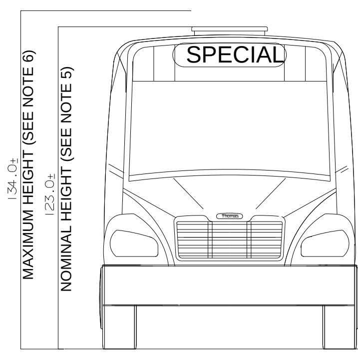


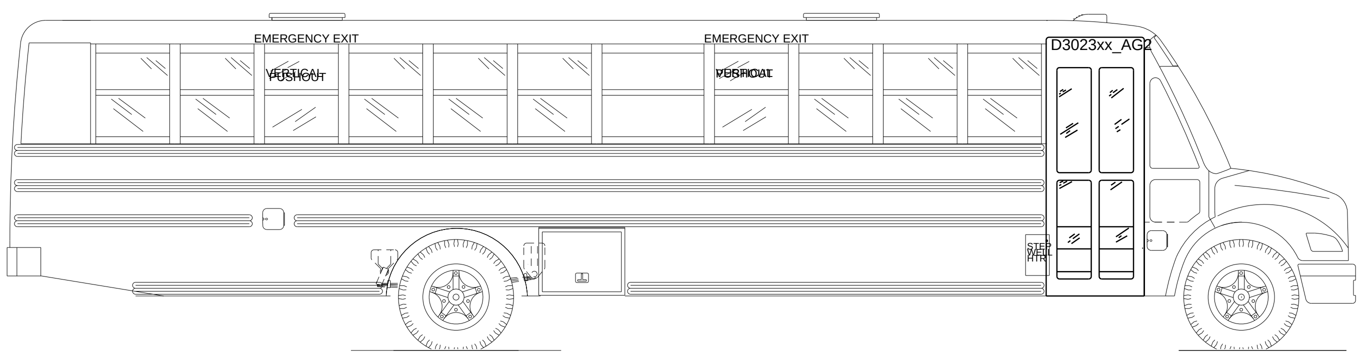


CAUTION! - LEFT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.

CAUTION! - RIGHT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.







Model: Saf-T-Liner C2
Quote Number: 326916
Locality: WA

GENERAL NOTES

1. SOME ITEMS, SUCH AS VENTS, MIRRORS, ETC. ARE SHOWN ONLY FOR CLARITY.
2. THIS DRAWING IS A REPRESENTATION ONLY AND MAY NOT BE AN EXACT REPRESENTATION. PLEASE REFER TO ORDER!
3. THE GROUND CLEARANCE AND HEIGHT DIMENSIONS VARY ACCORDING TO TIRE SIZE, BUS LOAD, AND SUSPENSION TYPE.
4. THE MAXIMUM WIDTH AT BELT LINE OVER GUARD RAILS IS 96".
5. THE NOMINAL BUS HEIGHT IS BASED ON A STANDARD BODY AND CHASSIS.
6. THE MAXIMUM BUS HEIGHT IS BASED ON BODY WITH LARGEST SUSPENSION ETC.
7. "OVER BUMPER" DIMENSION DOES NOT TAKE INTO ACCOUNT OPTIONS THAT MAY ADD TO THE TOTAL LENGTH OF THE BUS, SUCH AS MIRRORS, LIGHTS AND CROSSING ARMS.

SIDE	ROW	SPACING	KNEE ROOM
LEFT		26.0	24.8
LEFT		27.6	26.4
RIGHT		27.3	26.1

THOMAS BUILT BUSES,INC
HIGH POINT,NC

TITLE: PLAN AND ELEVATION BODY 341TS

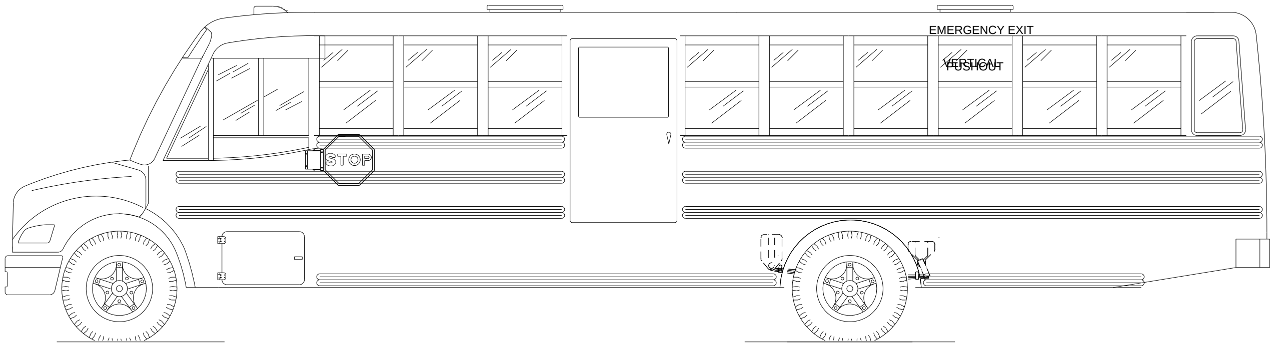
DRN:02-20-17 BY:J. Dominick | SIZE S | DWG. NO. 672566
SCALE 3/8"=12"

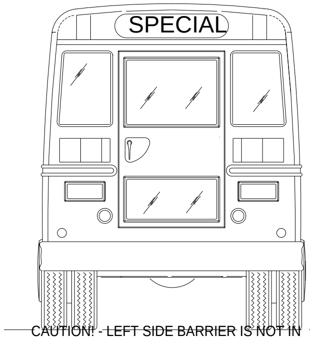
CAD DRAWING - DO NOT MAKE MANUAL CHANGES
Program Version: 17.2.19.1

CAD DRAWING - DO NOT MAKE MANUAL CHANGES

SEATING CAPACITY: 72 + DRIVER

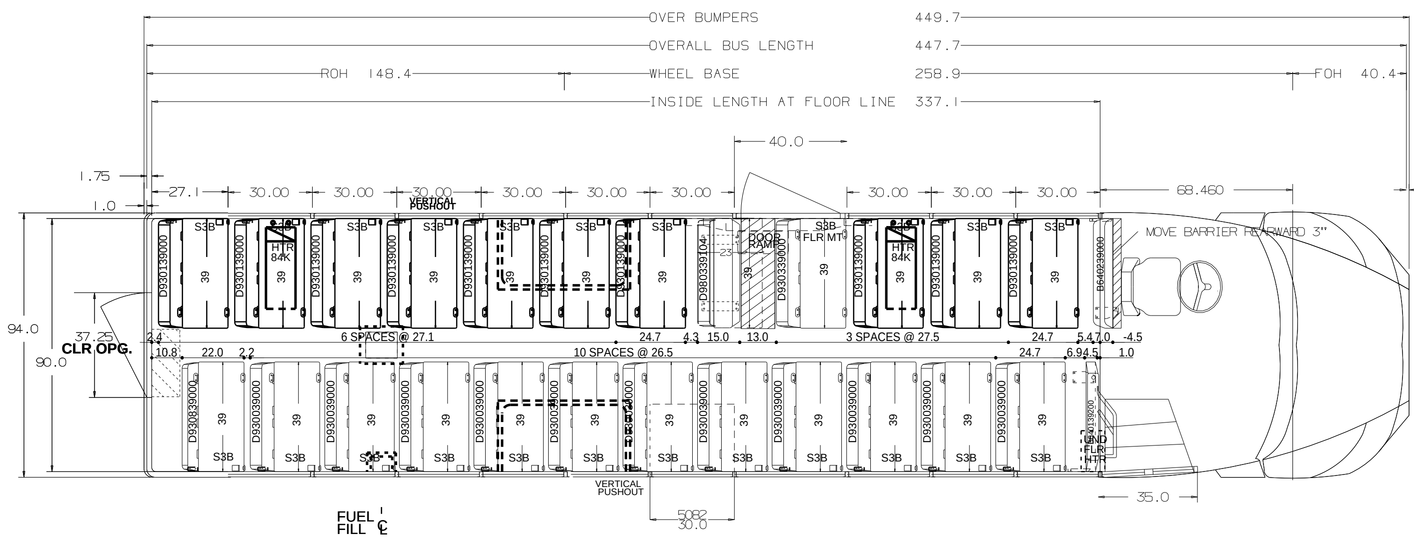
Appendix C

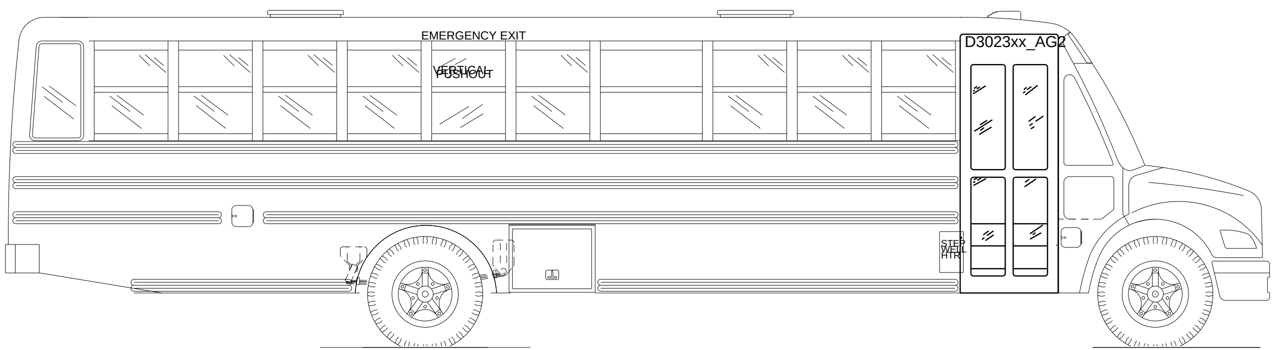




CAUTION! - LEFT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.

CAUTION! - RIGHT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.





ALL DIMENSIONS ARE FOR REFERENCE ONLY

Model: Saf-T-Liner C2
Quote Number: 339241
Locality: WA

GENERAL NOTES

1. SOME ITEMS, SUCH AS CV MIRRORS, ROOF LUGGAGE RACKS, AND OTHER ITEMS, ARE SHOWN IN ONE VIEW ONLY FOR CLARITY.
2. THIS DRAWING IS A REPRESENTATION ONLY AND MAY NOT HAVE ALL ITEMS REQUIRED. PLEASE REFER TO ORDER!
3. THE CLEARANCE BETWEEN BOTTOM OF BUS OR BOTTOM OF UNDERBODY COMPARTMENTS AND GROUND WILL VARY ACCORDING TO TIRE SIZE, BUS LOAD, AND SUSPENSION TYPE.
4. THE MAXIMUM WIDTH AT BELT LINE OVER GUARD RAILS IS 96".
5. THE NOMINAL BUS HEIGHT IS BASED ON A STANDARD BODY AND LARGEST SIZE TIRES.
6. THE MAXIMUM BUS HEIGHT IS BASED ON BODY WITH OPTIONS SUCH AS A/C UNITS, STROBE LIGHT, LARGEST SUSPENSION ETC.
7. "OVER BUMPER" DIMENSION DOES NOT TAKE INTO ACCOUNT OPTIONS THAT MAY ADD TO THE TOTAL LENGTH OF THE BUS, SUCH AS MIRRORS, LIGHTS AND CROSSING ARMS.

SIDE	ROW	SPACING	KNEE ROOM
LEFT		27.5	26.3
LEFT		27.1	25.9
RIGHT		26.5	25.3

THOMAS BUILT BUSES,INC
HIGH POINT,NC

TITLE PLAN AND ELEVATION BODY 311TS

DRN:01-23-18 BY:J. Dominick | SIZE S | DWG. NO. 714945
SCALE 3/8"=12"

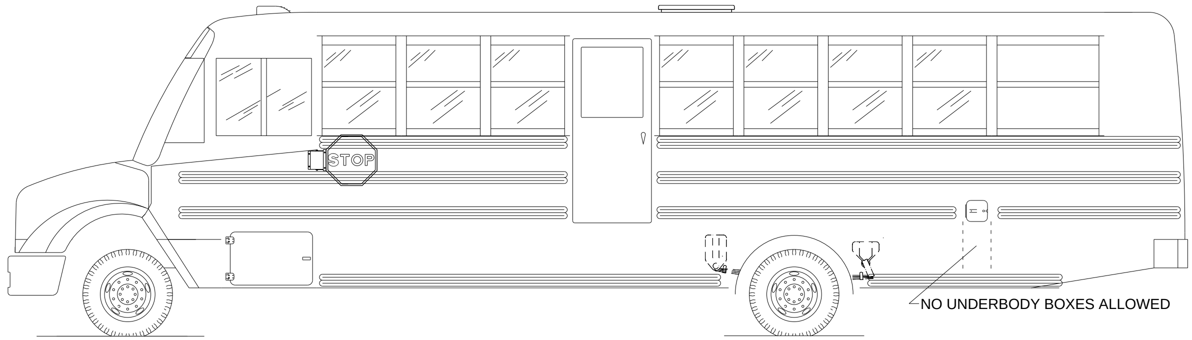
CAD DRAWING - DO NOT MAKE MANUAL CHANGES

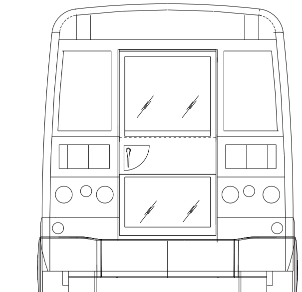
Program Version: 17.10.30.1

CAD DRAWING - DO NOT MAKE MANUAL CHANGES

Appendix C

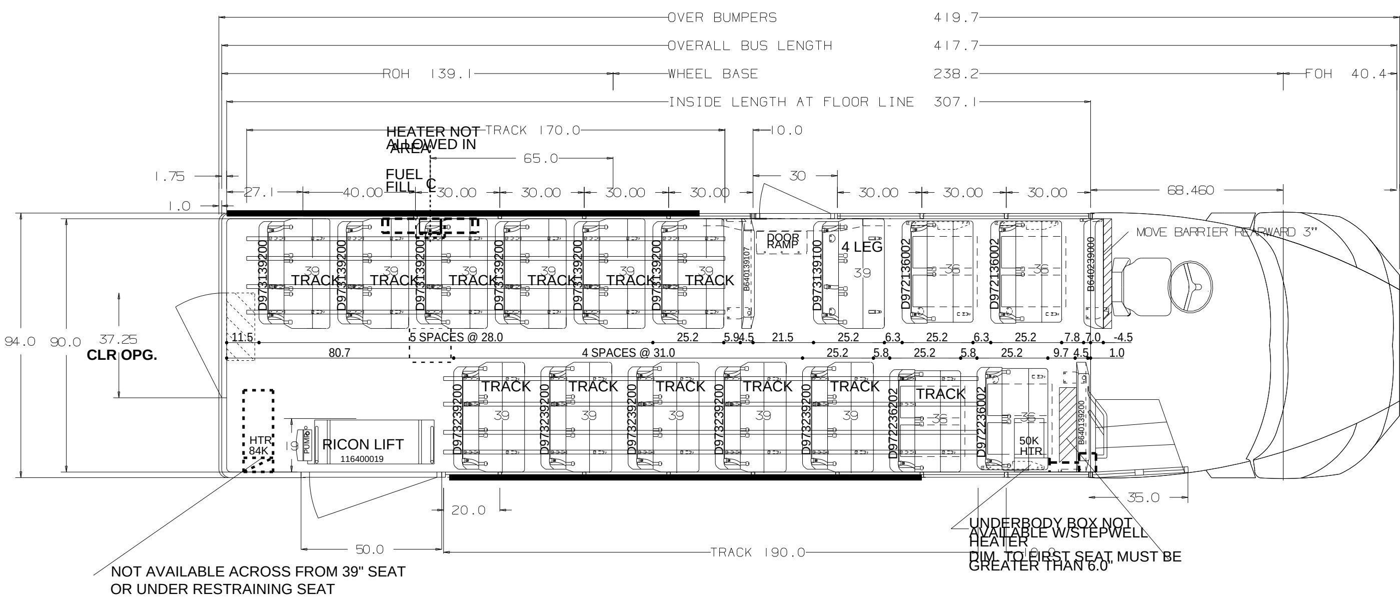
SEATING CAPACITY: 44 + DRIVER

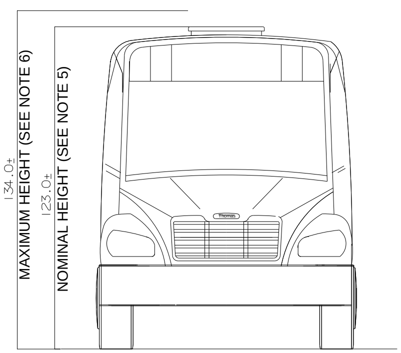




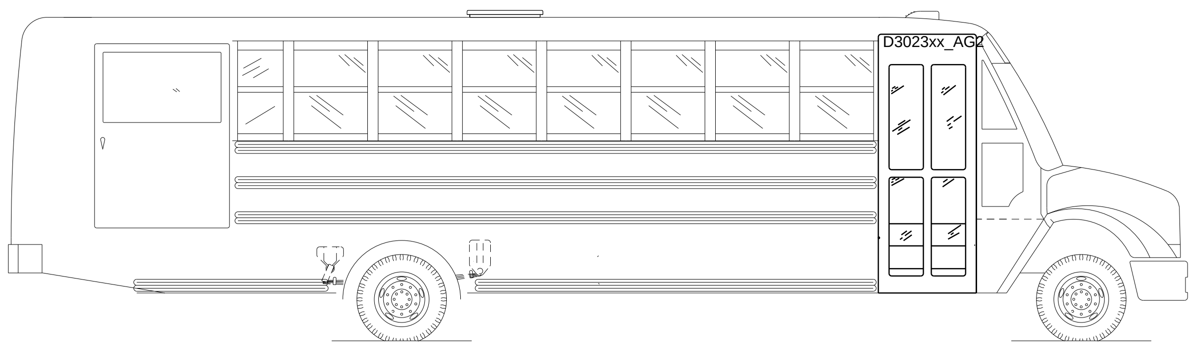
CAUTION! - LEFT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.

CAUTION! - RIGHT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.





NOTES:
UNIT IS CONFIGURED WITH A FLAT FLOOR
UNIT EQUIPPED WITH OVERHEAD TRACK REINFORCEMENT



Model: Saf-T-Liner C2
Units Ordered: 1
Order Number: N/A
Quote Number: 304962
Locality: WA
Build Date: N/A

GENERAL NOTES

1. SOME ITEMS, SUCH AS MIRRORS, ROOF LUGGAGE RACKS, AND OTHER ITEMS, ARE SHOWN IN ONE VIEW ONLY FOR CLARITY.
2. THIS DRAWING IS A REPRESENTATION ONLY AND MAY NOT HAVE ALL ITEMS REQUIRED. PLEASE REFER TO ORDER!
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4. THE MAXIMUM WIDTH AT BELT LINE OVER GUARD RAILS IS 96".
5. THE NOMINAL BUS HEIGHT IS BASED ON A STANDARD BODY AND LARGEST SIZE TIRES.
6. THE MAXIMUM BUS HEIGHT IS BASED ON BODY WITH OPTIONS SUCH AS A/C UNITS, STROBE LIGHT, LARGEST SUSPENSION ETC.
7. "OVER BUMPER" DIMENSION DOES NOT TAKE INTO ACCOUNT OPTIONS THAT MAY ADD TO THE TOTAL LENGTH OF THE BUS, SUCH AS MIRRORS, LIGHTS AND CROSSING ARMS.

SIDE	ROW	SPACING	KNEE ROOM
LEFT		28.0	25.9
RIGHT		31.0	28.9

THOMAS BUILT BUSES,INC
HIGH POINT,NC

TITLE PLAN AND ELEVATION BODY 281TS

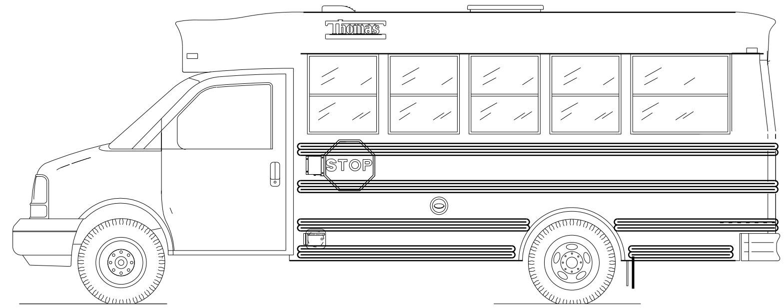
DRN:04-16-15 BY:K. Whisnant | SIZE S | DWG. NO. 595582
SCALE 3/8"=12"

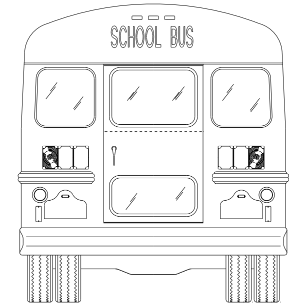
CAD DRAWING - DO NOT MAKE MANUAL CHANGES
Program Version: 15.4.1.1

CAD DRAWING - DO NOT MAKE MANUAL CHANGES

Appendix C

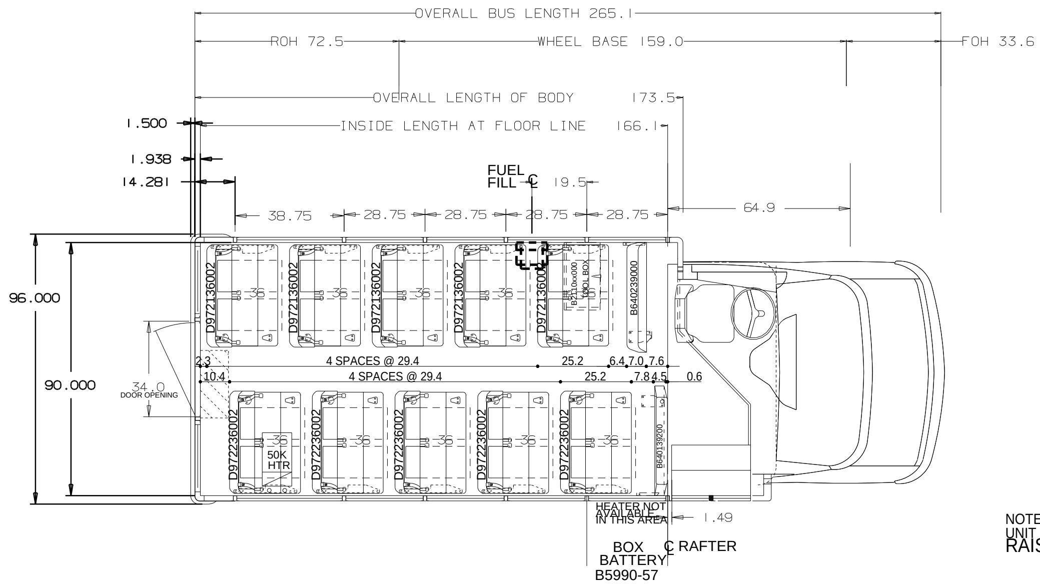
SEATING CAPACITY: 20 + DRIVER

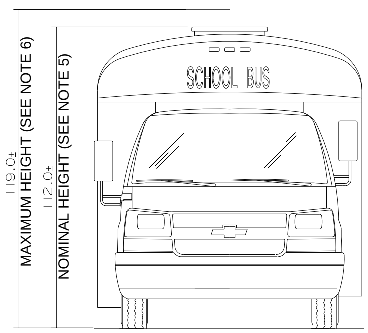




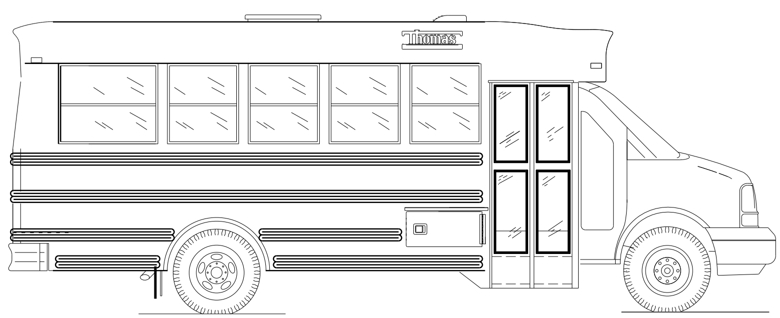
CAUTION! - LEFT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.

CAUTION! - RIGHT SIDE BARRIER IS NOT IN STANDARD LOCATION, SEE SEATING PLAN.





NOTES:
UNIT EQUIPPED WITH PLYWOOD FLOOR
RAISED FLOOR OPTION



Model: Minotour DRW
Quote Number: 339674
Locality: WA

ALL DIMENSIONS ARE FOR REFERENCE ONLY

GENERAL NOTES

1. SOME ITEMS, SUCH AS MIRRORS, ROOF LUGGAGE RACKS, AND OTHER ITEMS, ARE SHOWN IN ONE VIEW ONLY FOR CLARITY.
2. THIS DRAWING IS A REPRESENTATION ONLY AND MAY NOT HAVE ALL ITEMS REQUIRED. PLEASE REFER TO ORDER!
3. THE CLEARANCE BETWEEN BOTTOM OF BUS OR BOTTOM OF UNDERBODY COMPARTMENTS AND GROUND WILL VARY ACCORDING TO TIRE SIZE, BUS LOAD, AND SUSPENSION TYPE.
4. THE MAXIMUM WIDTH AT BELT LINE OVER GUARD RAILS IS 96".
5. THE NOMINAL BUS HEIGHT IS BASED ON A STANDARD BODY AND LARGEST SIZE TIRES.
6. THE MAXIMUM BUS HEIGHT IS BASED ON BODY WITH OPTIONS SUCH AS A/C UNITS, STROBE LIGHT, LARGEST SUSPENSION ETC.
7. "OVER BUMPER" DIMENSION DOES NOT TAKE INTO ACCOUNT OPTIONS THAT MAY ADD TO THE TOTAL LENGTH OF THE BUS, SUCH AS MIRRORS, LIGHTS AND CROSSING ARMS.

SIDE	ROW	SPACING	KNEE ROOM
LEFT		29.4	27.0
RIGHT		29.4	27.0

THOMAS BUILT BUSES,INC
HIGH POINT,NC

TITLE PLAN AND ELEVATION BODY 051MS

DRN:01-31-18 BY:J. Dominick SIZE S DWG. NO. 716548
SCALE 3/8"=12"

CAD DRAWING - DO NOT MAKE MANUAL CHANGES

Appendix D: Delivery Truck Dimensions

OVERALL DIMENSIONS

This section includes drawings of the base Model 220, which includes:

On the pages that follow, detail drawings show particular views of each component of the vehicle. They illustrate important measurements critical to designing bodies of all types. See the "Contents" at the beginning of the manual to locate the drawing you need.

Side View – Model 220

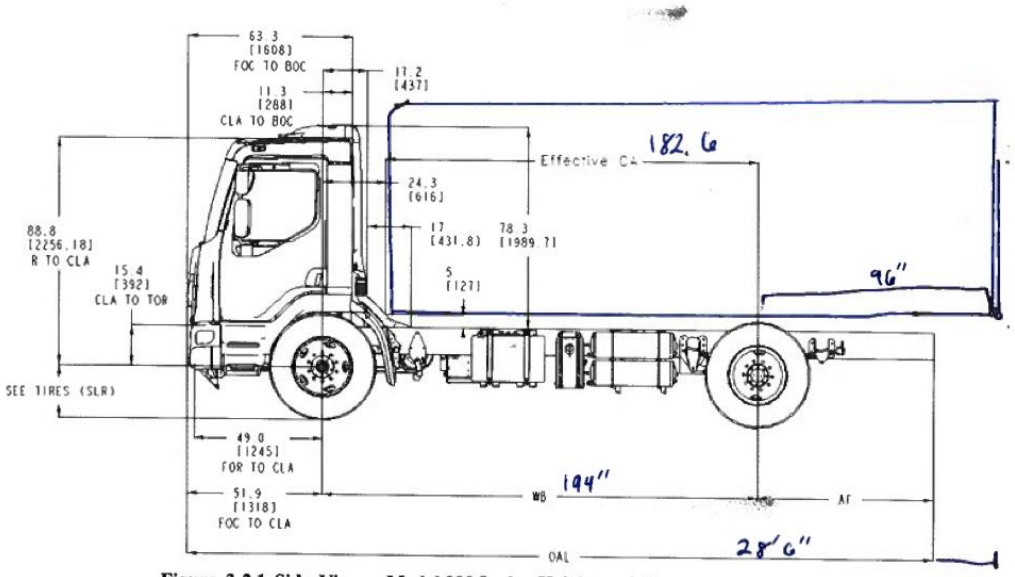


Figure 3-2.1 Side View —Model 220 Laden Height and Length Measurement

Overall Model 220 Dimensions:

1) FAX TO BOC = 11"

2) O.A .Length = 52"+WB+AF

3) Frame Length = 49"+WB+AF

4) Effective CA = WB-24.3" (24.3" is from C/L of front axle to the air cleaner duct with considering a 5" body spacer)

Appendix E

Map Guidelines

for SPS Site Emergency Management Plans

All Site Emergency Management Plans need 3 types of maps: ***Evacuation****,* ***Important Location****, and* ***Incident Command System (ICS)***

Evacuation Map:

The **Evacuation** Map should have arrows showing the routes out of buildings.

Potential hazards on routes should be taken into consideration, but the priority should be on evacuating quickly.

This map may also show exterior grouping locations for evacuation drills. However, any map posted for public view should only show evacuation directions, not regroup locations.

Important Location Map:

The **Important Location Map** should show the shut-offs for water and gas, the electrical master power switch and panel, fire extinguishers, AEDs, First Aid equipment, stoves, HVAC equipment, chemical storage, hazardous materials, emergency supplies, exterior water and power sources, along with other similar items.

The purpose of this map would be to have a quick reference for first responders and others about dangerous areas or important resources during an emergency, especially if the custodian is not available.

Incident Command System (ICS) Map:

The **Incident Command System** map would show preferred exterior staging areas for the areas or work groups designated in the ICS chart, especially, Incident Command, First Aid, Public Information. This would also include Family Reunification Plan locations.

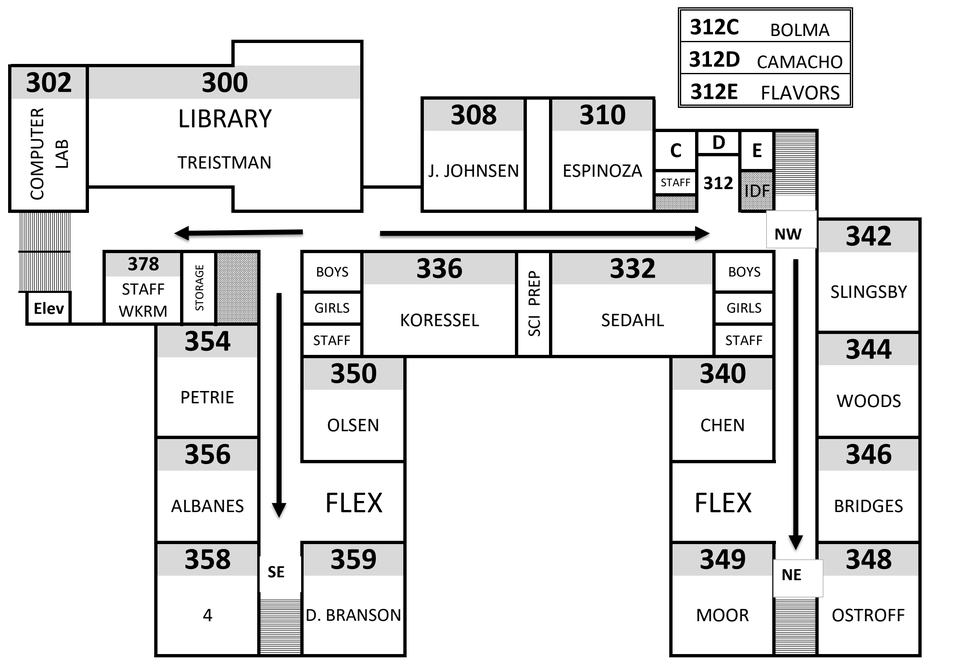
These areas would be 'preferred' locations as the nature of the emergency event could demand the use of other areas, even off campus.

Updated January 2020

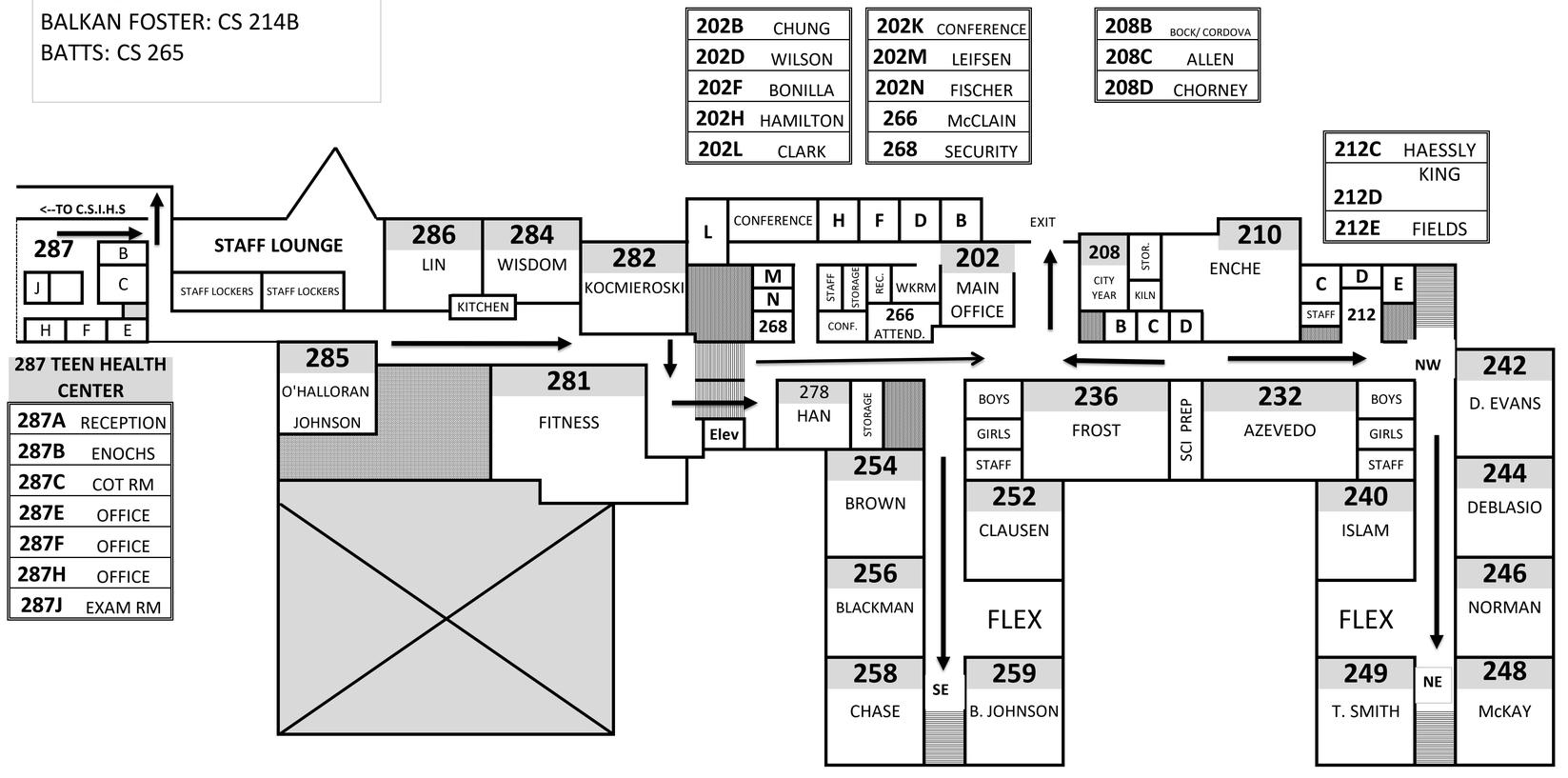
EVACUATION MAP

Classes on the Chief Sealth Side of Campus

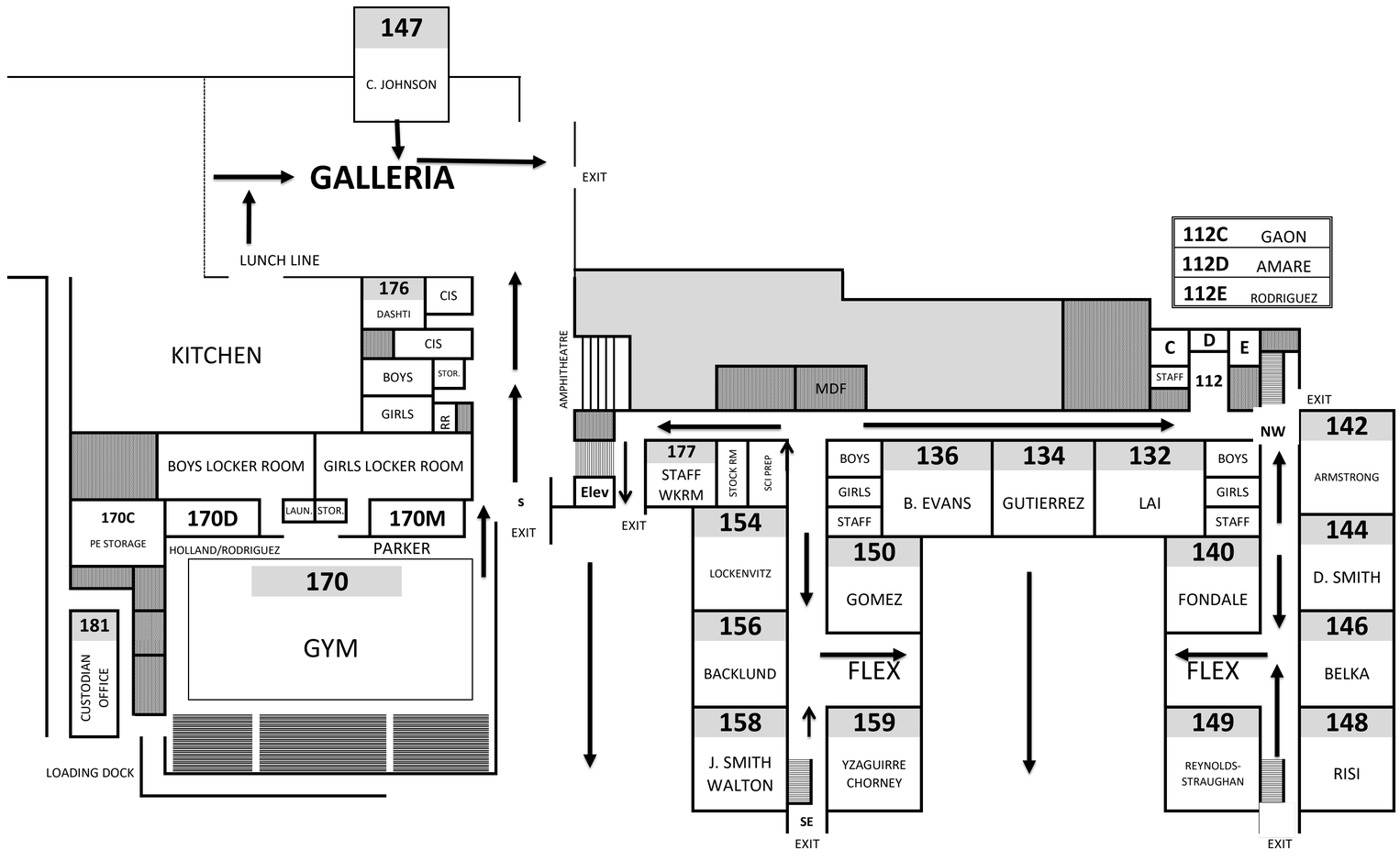
ROBERTS: CS 204
MORALES: CS 209
DELONG: CS 206
BALKAN FOSTER: CS 214B
BATTS: CS 265



3rd Floor



2nd Floor



1st Floor

Important Locations Map

Emergency Shut-Off Locations/Fire Extinguishers/AED Campus Map

____ AEDs (Head Custodian, School Nurse, & House Admin have keys)

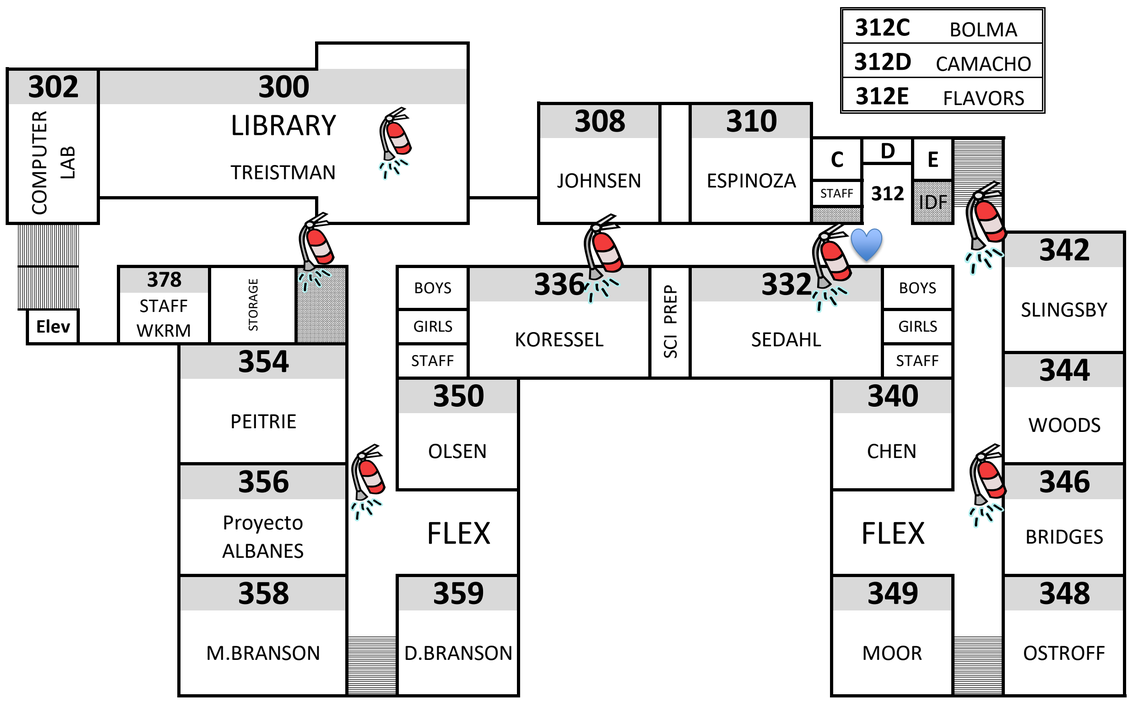
____ Electrical room located across from stockroom on 1st floor

____ Gas Shut-Off located near main custodial office on 2nd floor (near loading dock)

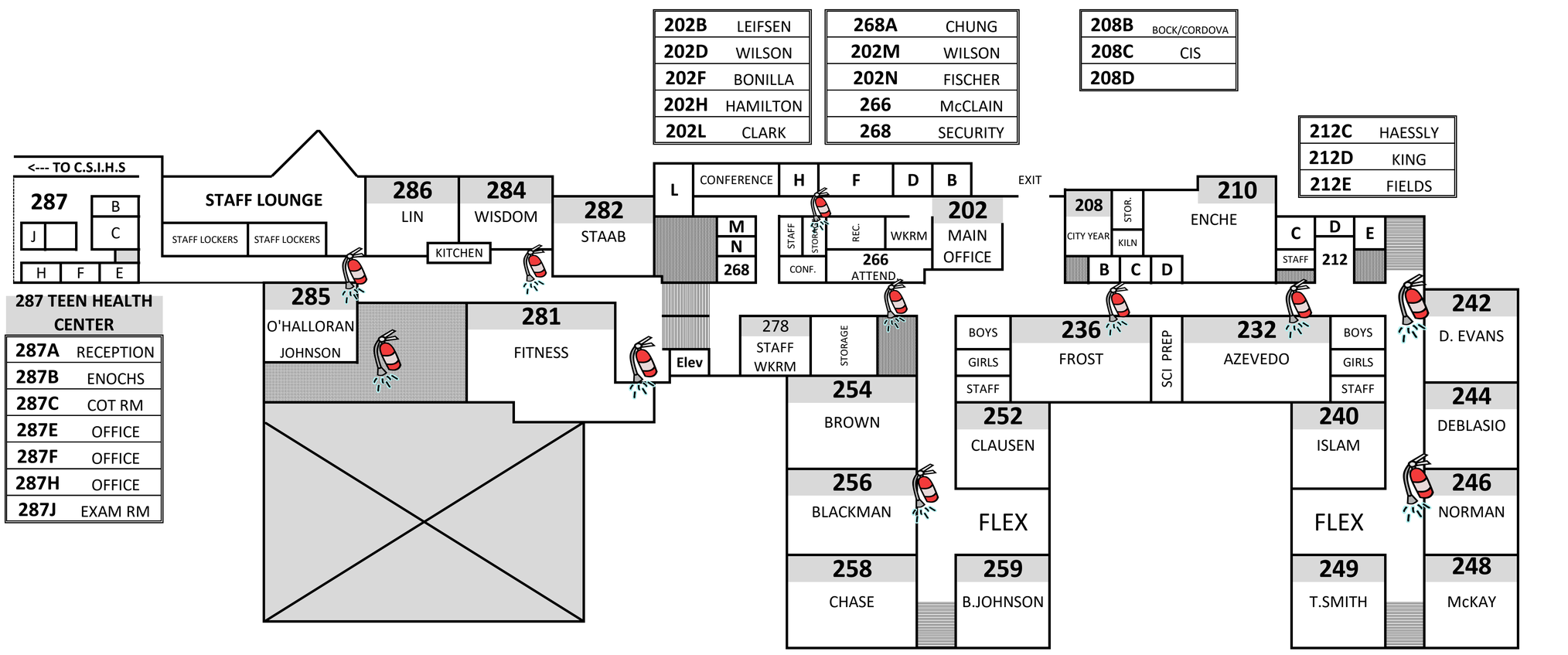
____ Fire Extinguishers located throughout building

____ Fire Sprinkler Zone located near NW exit on 1st floor

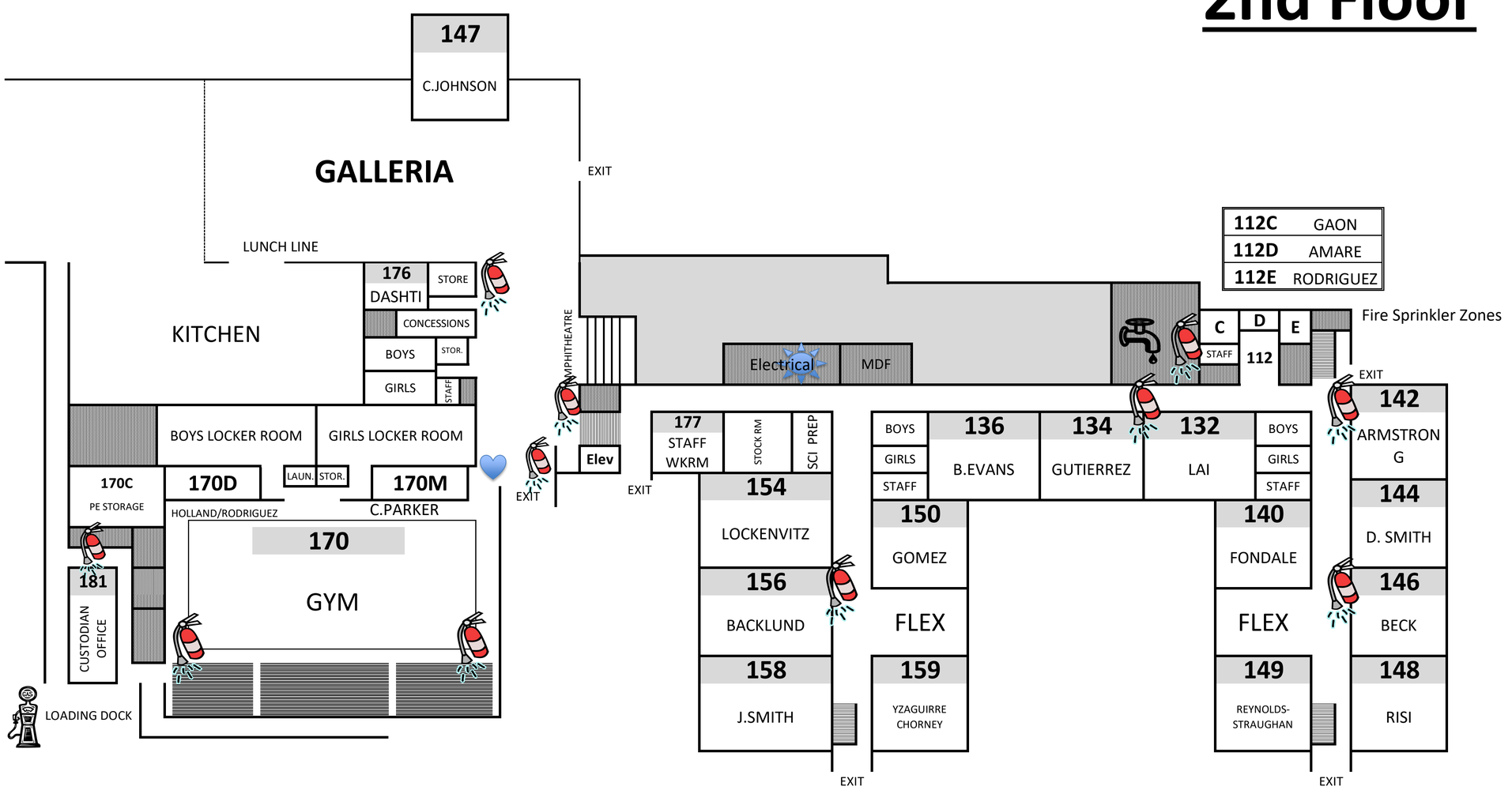
____ Main Water Shut-Off located on 1st floor in NW custodian storage room



3rd Floor



2nd Floor



1st Floor

EXCEPTION REQUEST

SEATTLE PUBLIC SCHOOLS

District-Wide Educational Specifications

Current requirement (refer to the existing guideline or standard):

Recommended change to the existing guideline or standard:

Reason for request (include site-specific program, or other reason):

*Attach additional backup if needed

Date change is requested: _____

Recommendations:

_____ ☐ Approve ☐ Deny

Project Manager Date

_____ ☐ Approve ☐ Deny

Sr. Project Manager Date

_____ ☐ Approve ☐ Deny

Capital Planning Date

☐ **Exception Denied. Follow original intent of Educational Specifications**

☐ **Exception Approved**

- ☐ **Project specific exception only**
- ☐ **Change to be incorporated into next revision of Educational Specifications**

Relevant References from the Collective Bargaining Agreement between SPS and Certificated Staff

For convenient reference, the portions of the Collective Bargaining Agreement that relate to class sizes, schedules, facilities, and the physical environment are excerpted below.

Safety and Security
The SPS and SEA are jointly committed to providing quality educational programs in a warm, open, supportive environment which protects the safety and security of all students and staff.[1]

Health and Safety Needs:
a. SPS shall provide a safe and healthy workplace per State law, WAC 296-24-020.
b. Teaching stations shall be equipped for the purpose of communicating in emergency situations.[2]

Benefits to employees:
a. A direct communication system shall be installed in elementary and secondary classrooms wherever possible and appropriate within budgetary constraints.
b. All regular, full-time, part-time and substitute employees will be provided space to secure personal belongings (e.g. coat, purse, etc.) [3]

Length of School Workday
Secondary School Day:
The standard working day in the building or on site…shall be seven and one-half hours inclusive of the twenty minutes before the beginning of the school day and the thirty minute duty-free lunch period, and shall include Preparation-Conference-Planning (PCP) time, as well as the twenty minutes after the student day in order to bring the total contractual work time to seven and one-half hours. The PCP time shall not be scheduled during the thirty minutes preceding the student day or the thirty minutes following the student day.[4]

Employee Load:
The SPS will consider as a reasonable maximum, secondary teacher assignments of no more than three different curriculum course preparations in no more than two subject fields. Secondary teachers will not teach more than five class periods per day without volunteering and being compensated for giving up their PCP time.[5]

PCP Time:
All secondary teachers shall plan with the building administration to have PCP time equivalent to one full class period per day.[6]

---

[1] Collective Bargaining Agreement between Seattle Public Schools and Seattle Education Association, Certificated Non-Supervisory Employees, 2019-22, p. 31.
[2] Ibid, p. 34.
[3] Ibid, p. 70.
[4] Ibid, p. 81.
[5] Ibid, p. 84.
[6] Ibid, p. 84.

Class Size & Staffing Ratios[7]

The SPS will maintain an average SPS building ratio of students to full-time equivalent teachers at no more than 26:1 for grades K-3; 28:1 for grades 4-5; and 150-1 for grades 6-12 (when grade 6 is conducted using a secondary model), exclusive of Special Education and Bilingual.

An exception to the average ratios will occur when the SPS ratios do not meet state mandated class reduction requirements as outlined in state budgetary decisions.

Secondary Regular Programs: Unless a building adopts a whole-school model that results in a variation, secondary Class Size to generally be limited to 32 students for core classes. Core is defined as including English/Language Arts; World Languages; Math; Science; and Social Studies.

Class size for non-core classes will be limited by space, safety, equipment needs, ability to supervise, and effective instruction. If non-core classes have been incorporated into an integrated/cluster curriculum, then class-size limits could apply.

Maintain staffing in special programs for students with disabilities at levels to provide exceptional children an opportunity to achieve to the best of their ability.

School Facilities, Teaching Stations and Itinerant Workspace[8]

1. Employees shall serve only in properly maintained, adequate facilities which provide standard heating, ventilation and lighting. The facility shall meet all health and safety standards for employees.

Movement of Employees Within the Program[9]

a) In assigning classrooms and teaching stations, an employee shall not be assigned to more than two teaching station assignments nor be required to "float" for two consecutive years without agreement.

Whenever possible, the SPS shall make the following provisions for the "floating" employee:
1) Adequate storage in each classroom in which the employee works, e.g. file and desk drawer, table with drawers, or a section of a cabinet;
2) Equipment and materials located within each room, e.g. books, basic laboratory equipment, and audio visual equipment so only the employee must move;
3) A private desk and file cabinet for the "floating employee" away from students, not necessarily in an individual office, but some place where only building staff members are admitted.

Bilingual Education[10]

The baseline staffing average for all level 1 and 2 performance management schools will consist of 1 ELL teacher for thirty five secondary students and 1 instructional assistant for thirty-five students. The baseline staffing average for all performance management schools levels 3, 4 and 5 will consist of 1 ELL teacher for forty-five secondary students and 1 instructional assistant for thirty-five students.

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[7] Ibid, p. 85-6.
[8] Ibid, p. 97.
[9] Ibid, p. 97.
[10] Ibid, p. 97.

FOUR KEY FRAMEWORKS for HIGH-PERFORMING MIDDLE SCHOOLS

	TURNING POINTS 2000: Educating Adolescents in the 21st Century (Carnegie - 2000)	Potential Facilities Implications	**BREAKING RANKS in the MIDDLE** National Association of Secondary School Principals - 2006	Potential Facilities Implications	**NATIONAL FORUM to ACCELERATE MIDDLE-GRADES REFORM** Schools to Watch (rubric updated 2018)	Potential Facilities Implications	**THIS WE BELIEVE** Association for Middle Level Education Updated 2021	Potential Facilities Implications
B E L I E F S	Early adolescence (is) a period of enormous opportunity for intellectual and emotional growth, yet one fraught with vulnerability and risk. The pressures facing young adolescents are indeed formidable, but, so, too is the capacity of many young adolescents to negotiate this period of intense biological, psychological, and interpersonal change successfully. Too often, the main educational institution serving young adolescents--the middle-grades school--falls far short of meeting the educational and social needs of millions of students. Middle grade schools are potentially society's most powerful force to recapture millions of youth adrift. Yet all too often they exacerbate the problems that youth face. A volatile mismatch exists between the organization and curriculum of middle grades schools, and the intellectual, emotional, and interpersonal needs of young adolescents.		We believe that we have the obligation to understand a student's personal needs and to challenge him or her by meeting those needs intellectually, socially, & personally. We believe a high performing school is one that is academically excellent, developmentally responsive, and socially equitable. By providing a variety of structured experiences in which students can be actively engaged, we believe we can address a student's need to achieve the following:		We believe that youth in the middle grades are capable of learning and achieving at high levels. We share a sense of urgency that high-performing schools with middle-grades become the norm, not the exception.		Educational programs for young adolescents should reflect what research and vast experience have demonstrated to be best for 10-15 year olds During these transitional years, students change significantly -- physically, intellecutally, morally, psychologically, and social-emotionally. The academic growth and personal development experienced during these important years significantly impact their futures.	

VISION	VISION FOR SUCCESS:	Potential Facilities Implications		Potential Facilities Implications	HIGH PERFORMING SCHOOLS with MIDDLE GRADES ARE:	Potential Facilities Implications	MAJOR GOALS of MIDDLE LEVEL EDUCATORS	Potential Facilities Implications
	A 15-year-old who has been well served during the middle years of schooling would be: :: An intellectually reflective person :: A person en route to a lifetime of meaningful work :: A good citizen :: A caring and ethical individual :: A healthy person An overarching goal is ensuring this success for EVERY student, including English language learners or those with disabilities. Middle grades schools should serve the "whole child," challenging students to think critically, to work industriously, to contribute to their communities, to care about others, and to care about their own phycial and mental health.		By providing a variety of structured experiences in which students can be actively engaged, we believe we can address a student's need to achieve the following: :: Express personal perspectives :: Create individual and group identities :: Examine options and choose his or her own path :: Take risks and assess the effects :: Use his or her own imagination :: Demonstrate mastery (of essential knowledge, understanding and skill)	Provide a variety of space sizes and types so that students can engage in a broader variety of activities.	**<u>Academically excellent:</u>** They challenge all students to use their minds well, providing them with the curriculum, instruction, assessment, support, and time they need to meet rigorous academic standards. They recognize that early adolescence is characterized by dramatic cognitive growth, which enables students to think in more abstract and complex ways. The curriculum and extra-curricular programs in such schools are challenging and engaging, tapping young adolescents' boundless energy, interests, and curiosity. Students learn to understand important concepts, develop essential skills, and apply what they learn to real-world problems. Adults in these schools maintain a rich academic environment by working with colleagues in their schools and communities to deepen their own knowledge and improve their practice. **<u>Developmentally Responsive:</u>** Such schools create small learning communities of adults and students in which stable, close, and mutually respectful relationships support all students' intellectual, ethical, and social growth. They provide comprehensive services to foster healthyphysical and emotional development. Students have opportunities for both independent inquiry and learning in cooperation with others. They have time to be reflective and numerous opportunities to make decisions about their learning. Developmentally responsive schools involve families as partners in the education of their children. They welcome families, keep them well informed, help them develop their expectations and skills to support learning, and assure their participation in decision-making. These schools are deeply rooted in their communities. Students have for active citizenship. They use the community as a classroom, and community members provide resources, connections, and active support. **<u>Socially Equitable:</u>** They seek to keep their students' future options open. They have high expectations for all their students and are committed to helping each child produce work of high quality. These schools make sure that all students are in academically rigorous classes staffed by experienced and expertly prepared teachers. These teachers acknowledge and honor their students' histories and cultures. They work to educate every child well and to over-come systematic variation in resources and outcomes related to race, class, gender and ability. They engage their communities in supporting all students' learning and growth.	Adults and students are grouped into smaller learning communities (e.g. teams, houses, academies). Spaces are provided for services and supports such as health services, mental health counseling, community partners, family support workers, family engagement, and others.	To become a fully functioning, self-actualized person, each young adolescent should: ::Become actively aware of the larger world, asking significant and relevant questions about that world and wrestling with big ideas and questions for which there may not be one right answer. :: Be able to think rationally and critically and express thoughts clearly. :: Read deeply to independently gather, assess, and interpret information from a variety of sources and read avidly for enjoyment and lifelong learning. :: Use digital tools to explore, communicate, and collaborate with the world and learn from the rich and varied resources available. :: Be a good steward of the earth and its resources and a wise and intelligent consumer of the wide array of goods and services available. :: Understand and use the major concepts, skills, and tools of inquiry in the areas of health and physical education, language arts, world languages, mathematics, natural and physical sciences, and the social sciences. ::Explore music, art, and careers, and recognize their importance to personal growth and learning. :: Develop his or her strengths, particular skills, talents, or interests and have an emerging understanding of his or her potential contributions to society and to personal fulfillment. :: Recognize, articulate, and make responsible, ethical decisions concerning his or her own health and wellness needs. :: Respect and value the diverse ways people look, speak, think, and act within the immediate community and around the world. :: Develop the interpersonal and social skills needed to learn, work, and play withothers harmoniously and confidently. :: Assume responsibility for his or her own actions and be cognizant of and ready to accept obligations for the welfare of others. :: Understand local, national, and global civic responsibilities and demonstrate active citizenship through participation in endeavors that serve and benefit those larger communities. **Essential Attributes** **Responsive:** Using the distinctive nature and identities of young adolescents as the foundation upon which all decisions about school are made. **Challenging:** Cultivating high expectations and advancing learning for every member of the school community. **Empowering:** Facilitating environments in which students take responsibility for their own learning and contribute positively to the world around them. **Equitable:** Providing socially just learning opportunities and environments for every student. **Engaging:** Fostering a learning atmosphere that is relevant, participatory, and motivating for all learners.	Places that connect students to the environment and where stewardship can be taught. Places that encourage independent reading. A rich array of digital tools available wherever needed. Settings that support skillbuilding and personal expression through music, art and exploration of interests that may lead to career paths. One or more places for rotating (digital or analog) exhibits or displays about diverse cultures and customs. A variety of smaller settings are provided that facilitate learning and working together in manageable size groups Environments organized to focus on the student as learner rather than the teacher as instructor. A variety of smaller settings that facilitate learning and working together in small groups.

STRATEGIES & STRUCTURES	ESSENTIAL PRINCIPLES for IMPROVING MIDDLE GRADES EDUCATION	Potential Facilities Implications	NINE CORNERSTONE STRATEGIES for IMPROVEMENT	Potential Facilities Implications	SCHOOLS TO WATCH CRITERIA	Potential Facilities Implications	CHARACTERISTICS: Goals are best achieved thru programs and practices that align with the following 16 interdependent characteristics:	Potential Facilities Implications
	Teach a curriculum grounded in rigorous, public academic standards for what students should know and be able to do, relevant to the concerns of adolescents and based on how students learn best.	Settings that support active, inquiry-based and project-based learning (reconfigurable furnishings, breakout spaces, materials storage). Could this mean a different mix of classrooms, labs and other flexible learning settings?	Establish the academically rigorous essential learnings that a student is required to master in order to successfully make the transition to high school and align the curriculum and teaching strategies to realize that goal.		**ACADEMIC EXCELLENCE:** :: All students are expected to meet high academic standards. :: Curriculum, instruction,assessment, and appropriate academic interventions are aligned with high standards. :: The curriculum emphasizes deep understanding of important concepts and the development of essential skills. :: Instructional strategies include a variety of challenging and engaging activities that are clearly related to the grade-level standards, concepts, and skills being taught. :: Teachers use a variety of methods to assess and monitor the progress of student learning (e.g., tests, quizzes, assignments, exhibitions, projects, performance tasks, portfolios, student conferences). :: The faculty and master schedule provide students time to meet rigorous academic standards. :: Students are provided the support they need to meet rigorous academic standards. :: The adults in the school are provided time and frequent opportunities to enhance student achievement by working with colleagues to deepen their knowledge and		**Curriculum, Instruction, and Assessment Characteristics** Educators value young adolescents and possess a depth of understanding in the content areas they teach.	
	Use instructional methods designed to prepare all students to achieve high standards and become lifelong learners.	Settings that support a variety of approaches beyond direct instruction	Create dynamic teacher teams that are afforded common planning time to help organize and improve the quality and quantity of interactions between teachers and students.	Places for teams of teachers to plan together (conference rooms where they can leave materials and resources or displays?)			Instruction fosters learning that is active, purposeful, and democratic using multiple learning and teaching approaches.	Settings that support active, project-based learning (reconfigurable furnishings, breakout spaces, materials storage). Settings that support a variety of approaches beyond direct instruction.
	Staff middle grade schools with teachers who are expert at teaching young adolescents, and engage teachers in ongoing, targeted professional development opportunities.	"Large schools should be divided into smaller learning communities, with teams of teachers and students as the underlying organizational structure."	Provide structured planning time for teachers to align the curriculum across grades & schools & to map efforts that address the academic, developmental, social, and personal needs of students, especially at critical transition periods (elementary to middle and middle to high school).				Curriculum is challenging, exploratory, integrative, and diverse.	Places for teams of teachers to plan integrative curriculum
	Organize relationships for learning to create a climate of intellectual development and a caring community of shared educational purpose.						Varied and ongoing assessments advance learning as well as measure it.	
	Govern democratically through direct or representative participation by all school staff members, the adults who know students best.		Implement a comprehensive advisory or other program that ensures that each student has frequent and meaningful opportunities to meet with an adult to plan and assess the student's academic, personal, and social development.	Settings that support that guidance…if advisories are used, for example, then enough spaces that all can meet in appropriate sized groups			**Leadership and Organization Characteristics** A shared vision developed by all stakeholders guides every decision.	
	Provide a safe and healthy school environment as part of improving academic	Welcoming, warm, daylit, transparent to foster a community of connections…	Ensure that teachers assess the individual				Leaders are committed to and knowledgeable about this age group, educational research, and best practices. Leaders demonstrate courage and collaboration.	
	performance and developing caring and ethical citizens.		learning needs of students and tailor instructional strategies and multipleassessments accordingly.				Ongoing professional development reflects best educational practices.	
	Involve parents and communities in supporting student learning and healthy development.	One or more spaces that welcome families, to provide resources for them to understand young adolescents, and to comfortably meet with staff; and spaces that allow partners, where appropriate, to integrate their services and supports into the school community.	Entrust teachers with the responsibility of implementing schedules that are flexible enough to accommodate teaching strategies consistent with the ways students learn most effectively and thatallow for effective teacher teaming, common planning time, and other lesson planning.		**DEVELOPMENTAL RESPONSIVENESS:** :: The staff creates a personalized environment that supports each student's intellectual, ethical, social, and physical development. :: The school provides access to comprehensive services to foster healthy physical, social, emotional, and intellectual development. :: All teachers foster curiosity, creativity and the development of social skills in a structured and supportive environment. :: The curriculum is both socially significant and relevant to the personal and career interests of young adolescents. :: Teachers use an interdisciplinary approach to reinforce important concepts, skills, and address real-world problems. :: Students are provided multiple opportunities to explore a rich variety of topics and interests in order to develop their identity, learn about their strengths, discover and demonstrate their own competence, and plan for their future. :: Students have opportunities for voice - posing questions, reflecting on experiences, and participating in decisions and leadership activities. :: The school staff members develop alliances with families to enhance and support the well-being of the children	"Adults and students are grouped into smaller learning communities (e.g. teams, houses, academies) for enhanced teaching and learning." The facility is designed to support these smaller communities. "Every student has a mentor, advisor, advocate or other adult he/she trusts and stays in a relationship with throughout the middle grades experience."	Organizational structures foster purposeful learning and meaningful relationships. The interdisciplinary team of two or more teachers working with a common group of students in a block of time is the signature component of high-performing schools, literally the heart of the school from which other desirable programs and experiences evolve.	Settings should be organized to support small interdisciplinary teams of teachers working with a common group of students.
			Institute structural leadership systems that allow for substantive involvement in decision making by students, teachers, family members, and the community, and that support effective communication among these groups.	One or more spaces that welcome and support integration of family and community members into the school community.			**Culture and Community Characteristics** Educators respect and value young adolescents.	Welcoming, warm, daylit, transparent to foster connections.
			Align all programs and structures so that all social, economic, and racial/ethnic groups have open and equal access to challenging activities and learning.				The school environment is welcoming, inclusive, and affirming for all.	
			Align the schoolwide comprehensive, ongoing professional development program and the Personal Learning Plans (PLPs) of staff members with the requisite knowledge of content, instructional strategies, and student developmental	Places for teams of teachers to plan together (conference rooms where they can leave materials and resources or displays?)			Every student's academic and personal development is guided by an adult advocate.	Settings that support that guidance…if advisories are used, for example, then enough spaces that all can meet in appropriate sized groups
							Comprehensive counseling and support services meet the needs of young adolescents.	Spaces for the service providers, potentially integrated throughout the school, as well as spaces conducive to confidential conversations.
							School safety is addressed proactively, justly, and thoughtfully.	

S T R A T E G I E S & S T R U C T U R E S					:: Staff members provide all students with opportunities to develop citizenship skills, to use the community as a classroom, and to engage the community in providing resources and support. ::The school provides age-appropriate, co-curricular activities to foster social skills and character, and to develop interests beyond the classroom environment. **SOCIAL EQUITY:** :: To the fullest extent possible, all students, including English learners, students with disabilities, gifted and honors students, participate in heterogeneous classes with high academic and behavioral expectations. :: Students are provided the opportunity to use many and varied approaches to achieve and demonstrate competence and mastery of standards. :: Teachers continually adapt curriculum, instruction, assessment, and scheduling to meet their students' diverse and changing needs. :: All students have equal access to valued knowledge in all school classes and activities. :: Students have ongoing opportunities to learn about and appreciate their own and student well. :: To the fullest extent possible, the faculty welcomes and encourages the active participation of all its families and makes sure that all its families are an integral part of the school. :: The school's reward system is designed to value diversity, civility, service, and democratic citizenship. :: To the fullest extent possible, staff members understand and support the family backgrounds and values of its students. :: The school rules are clear, fair, and consistently applied.	Settings provide opportunities for a variety of clubs, exploratory and service opportunites, as well as a rich program of visual and performing arts. A variety of smaller settings are provided that support differentiated instruction, tutoring, mentoring, special adaptations, interventions, and other supports. Settings support a variety of approaches beyond direct instruction, providing flexible spaces with movable furnishings. Spaces support comfortable staff-student-family meetings, as well as parent/family education activities.	Health and wellness are supported in curricula, school-wide programs, and related policies. The school engages families as valued partners. The school collaborates with community and business partners.	Consider how spaces can support restorative justice. One or more spaces that welcome families, to provide resources for them to understand young adolescents, and to comfortably meet with staff Spaces that allow partners to integrate their services and supports into the school as appropriate.

IMPLICATIONS for FACILITIES to SUPPORT HIGH PERFORMING SCHOOLS

Large schools should be divided into smaller learning communities, with teams of teachers and students as the underlying organizational structure.	✓		✓	
Settings should be organized to support small interdisciplinary teams of teachers working with a common group of students.			✓	✓
Places for teams of teachers to plan together (conference rooms where they can leave materials and resources or displays?)		✓	✓	✓
Settings that support active, inquiry-based and project-based learning (reconfigurable furnishings, breakout spaces, materials storage); possibly a different mix of classrooms, labs and other flexible learning settings?	✓		✓	
Settings that support a variety of approaches beyond direct instruction	✓		✓	✓
A variety of smaller settings are provided that support differentiated instruction, tutoring, mentoring, special adaptations, interventions, and other supports, and facilitate learning and working together in manageable size groups	✓		✓	✓
Welcoming, warm, daylit, transparent to foster a community of connections…	✓			✓
Places that encourage independent reading.				✓
A rich array of digital tools available wherever needed.				✓
Places that connect students to the environment and where stewardship can be taught.				✓
Interior and exterior settings that support movement and physical education; as well as meaningful inquiry through the integration of the core disciplines.				✓
Settings that support skillbuilding and personal expression through music, art and exploration of interests that may lead to career paths.			✓	✓
One or more places for rotating (digital or analog) exhibits or displays about diverse cultures and customs.				✓
Settings that support that guidance…if advisories are used, for example, then enough spaces that all can meet in appropriate sized groups		✓		✓
Spaces for the service providers, potentially integrated throughout the school, as well as spaces conducive to confidential conversations				✓
One or more spaces that welcome families, to provide resources for them to understand young adolescents, and to comfortably meet with staff	✓	✓	✓	✓
Spaces that allow partners, where appropriate, to integrate their services and supports into the school	✓	✓	✓	✓