# NORWOOD PUBLIC SCHOOLS

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# **MODULE 3: PRELIMINARY DESIGN PROGRAM**

June 1, 2021

## 1.2 Coakley Middle School Educational Program

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# A. INTRODUCTION

## **Vision Statement**

The Norwood Public Schools is committed to providing each student with a comprehensive and innovative education in an inclusive, safe and supportive environment.

All Norwood Public School students will:

- be respectful, responsible, resilient, caring, and confident individuals;
- be able to communicate effectively, think critically, and work both independently, collaboratively, and creatively.
- be culturally competent global citizens who are civically active and embrace diversity in an increasingly interconnected world;
- be successful lifelong learners who are future (college and career) ready.

# **Coakley Middle School Mission**

The mission of Dr. Philip O. Coakley Middle School is to develop global citizens who appreciate learning. In partnership with the Norwood community, we foster social, emotional, and intellectual growth in a safe, inclusive, and academically rigorous environment. We are committed to the core values of respect and responsibility.

# Historical Context of Norwood<sup>1</sup>

The Town of Norwood, which was officially formed in 1872, originated as a part of Dedham. The Norwood area was first settled by Ezra Morse in 1678. He set up a sawmill in what is now South Norwood, The part of town to which the first concentration of families, almost all of whom were farmers, migrated over the next half-century.

Two generations later, the approaching conflict with Britain that was to result in independence for the American colonies produced the event which, more than any other, defines Norwood historically in the minds of its citizens. Captain Aaron Guild, who had served Britain earlier in its war against the French and Indians, was ploughing his fields on the morning of 19 April 1775. Upon hearing of the clash that had occurred in Lexington earlier that day Captain Guild "... left plough in furrow and oxen standing ..." and hastened to the site of the conflict, arriving in time to participate in the final stages of the battle. This legendary act is commemorated on the town seal.

The early decades of the Nineteenth Century saw the slow transformation of South Dedham from an almost exclusively farming community to a mixed agricultural/ industrial economy. The establishment of stage

<sup>&</sup>lt;sup>1</sup>This section borrows heavily from the Town of Norwood's archived page "A Brief History of Norwood" https://web.archive.org/web/20061206041140/http://www.ci.norwood. ma.us/townhall/brief.html

coach service between Boston and Providence over a road that passed through South Dedham shortly prior to the Revolutionary War was greatly advantageous to commercial activity, and the opening of the Norfolk and Bristol Turnpike in 1806, coinciding as it did with the spread of the industrial revolution through the area, provided as even greater impetus. The run of Washington Street from South Norwood to South Walpole, mile after mile of straight roadway, testifies to the vast changes which the industrial era was making in the landscape.

During the final three decades of the Nineteenth Century, Norwood experienced vigorous industrial expansion. Railroad maintenance and repair shops located in the town, Bird & Sons opened a roofing plant on Pleasant Street, and the foundations were laid for the printing industry which was to fuel a large part of Norwood's financial strength through the first three-quarters of the Twentieth Century.

The new century opened with the decision to create a municipal electric light plant, one of the very few in the commonwealth, which was completed in 1907. Two years later the man who was probably Norwood's most public-spirited citizen, George F. Willett turned his attention from the Winslow Brothers and Smith tannery which he had helped to found, to civic affairs. At the same time, increased production by the tannery and the Bird plant drew many immigrants from countries that had previously been only scantly represented in Norwood's population. Scandinavia and the Mediterranean provided large numbers, with Syrians in the lead, until World War 1 temporarily slowed immigration. Norwood as a place for immigrants to begin to make a home for themselves continues to this day.

The Norwood stretch of Providence Highway (U.S. Route 1) was completed in 1934, providing a new strip of land available for commercial development to the south of and roughly parallel to Washington Street.

The growth in population, which was to nearly double in size over the next quarter-century, caused a boom in the construction of single family residences. As land for this purpose became more expensive, the focus shifted to apartments, which now constitute a significant portion of the town's housing stock. In addition, during the late forties a million-dollar housing project for veterans was constructed. On the labor front, the experience of the era immediately following World War I was repeated, with frequent strikes reducing worker income and company profits. It was at this period that the often painful adjustment from heavy industry to light manufacturing began. Bendix Aviation closed in 1945; and the long-time Norwood firm, Winslow Brothers and Smith, closed one of its facilities after a 1949 strike. Although these job losses were partially made up by firms which located in Norwood or expanded existing facilities, this process did not develop with great strength until the fifties, and unemployment remained a serious problem through the remaining years of the forties. Another significant change in municipal government occurred in 1947 when the town moved from the traditional open town meeting format, with

every registered voter eligible to attend and vote on the articles in the warrant, to the present system of electing a limited number of town meeting members by district.

The 1950's were a period of outstanding growth, only partially offset by the departure from the scene of some venerable Norwood Businesses. The population increased by fifty percent during the decade, while the number of commercial enterprises more than doubled. The Winslow Brothers and Smith tannery finally ceased operation, as did the Norwood Press, but the arrival of such major firms as Northrop, Mason-Neilan, and Raytheon more than made up for the jobs lost in the closing of the old-line industries.

During the 1960's Polaroid added significantly to the manufacturing capacity of the town when it constructed a camera factory on the old Forbes estate on Route 1A near Islington. On the same side of the town the Norwood Research and Industrial Park opened, providing well over one hundred acres of prime industrial land for development. Norwood Hospital opened the first of two additions, one in the early sixties, which virtually doubled its capacity, the second in the early eighties on land ceded by the Civic Association.

The decades of the seventies and eighties saw other changes along the main street as businesses came and went with the fluctuations of the economy. Also affecting the business climate in the center of town was the explosion of large shopping malls in the surrounding area and even mini-malls along Route 1 in Norwood. The era of doing one's shopping in downtown stores has passed by, and many stores found themselves struggling for survival.

There was a slight decline in the overall population of the town in those two decades, and a significant decline in the number of school-age children. The latter factor led to the closing of the Shattuck, Winslow, Guild and Willett elementary schools, as well as the closing of Junior High North on Prospect Street. The population trend also led to the moving the sixth grade from the elementary schools to the Junior High on Washington Street in South Norwood, and the ninth grade from the Junior High to the High School. The former school buildings did not remain idle, however. They were soon converted to such uses as senior citizen housing, professional and medical offices, and school administration.

Norwood of the 21st century continues to adapt to the times:

The new Norwood High School opened in 2011. The now ten-year-old school stands behind the site of the original structure. To honor its past, the new Norwood High has columns and a clock tower similar to the facade of the old building. The new Norwood High School was built following one of three designs for high schools that the Massachusetts School Building Authority calls "model schools."

Companies large and small continue to find Norwood a businessfriendly town and have set up here recently. Moderna Therapeutics, a clinical-stage biotechnology company, opened a state-of-the-art manufacturing facility in Norwood in 2018. More than 200 employees work at the Norwood facility in a wide range of roles including production operations, manufacturing science and technology, quality control, engineering services, supply chain management and process development.

Norwood Hospital, boasting of a 100-year history of providing health care services to Norwood and the surrounding communities, was ravaged by flash flooding in 2020 and has been closed for the last several months. An expanding Dedham Medical Associates of Norwood has been able to offer support to the Norwood community during this time. A new "career pathway" at Norwood High School offers students the classes, preparation, and internship experience needed to be employed in the healthcare industry post high school and/or college.

The housing stock in Norwood remains stable, with only moderate changes in the number of new homes built recently. An aging population could lead to the influx of homes to the real estate market in the next ten years, creating opportunity for families with children to take advantage of everything Norwood offers and purchase a home here.

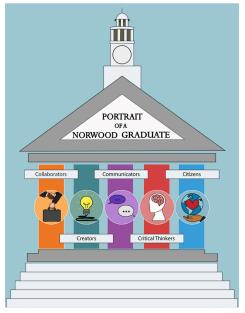
Norwood has always been a community with a multitude of activities for its youth. In addition to the extracurricular baseball, softball, football, and hockey programs long in place in this town, there are now extensive youth soccer and basketball programs as well. Many of these activities take place on fields that have been constructed or renovated in recent years through the hard work of many volunteers and cooperation of the town. The indoor sports that once took place at the Civic on Washington Street (where the Norwood Hospital is now) were moved along with the Civic to the former Norwood Armory on Nahatan Street.

# **Educational Vision**

# Portrait of a Graduate

Norwood Public Schools have invested significant time in their school and district strategic planning efforts over the last three years, beginning with the development of a framework for their educational goals, titled "Portrait of a Norwood Graduate" in 2018.

The Portrait of a Norwood Graduate outlines five key goals for all students who go through the Norwood educational system:



## Collaborators

- Solve problems together
- Converse respectfully
- Demonstrate responsibility and accountability
- Understand self and consider other points of view

## Creators

- Ask questions driven by curiosity
- Design innovative solutions and products
- Take risks and persevere throughout the process
- Think independently

## Communicators

- Listen and speak effectively
- Write for diverse audiences and purposes
- Express through various mediums
- Ensure all voices and ideas are heard and expressed

## Critical thinkers

- Gather and evaluate information
- Propose a solution
- Set goals and execute a plan
- Reflect and improve

## Citizens

- Get involved constructively
- Contribute respectfully
- Engage responsibly
- Advocate for equity

#### Norwood Strategic Plan Core Values

- 1. Improved Student Learning
- 2. Social Emotional Wellness
- 3. Innovative Teaching and Leadership
- 4. Positive Learning Culture

5. Productive Community Partnerships

# Strategic Plan

These goals resulted in the District rewriting their Mission and Vision statements and restating their Core Values. Ultimately, they were turned into measurable action through the District's Five-Year Strategic Plan that was the culmination of a year of collaboration between the community, the schools, and the Town of Norwood. Currently, staff across the District are developing research based pedagogical approaches on how the skills are taught and assessed in each grade level and content area.

The Strategic Plan lays out Objectives and Benchmarks that will help focus and prepare the Norwood Public Schools staff, and the greater Norwood community, in delivering a comprehensive, student-centered, and relevant education to every student, every day:

- The Plan emphasizes social and emotional well-being, critical thinking, collaborative problem solving, and authentic learning experiences in appropriate spaces, allowing the District to position itself to ensure that every student becomes a competent global citizen and an active life-long learner.
- By working to create a purposeful and sustainable budget to provide sufficient funds to operate and improve the Norwood

Coakley Middle School Educational Program | REVISED June 1, 2021

Public Schools, the system is poised to improve student achievement.

- The Plan upholds the larger District goal of creating facilities that are centers for innovation and comprehensive educational experiences, and that will foster and promote problem solving and creativity for both staff and students within a safe environment.
- The District's commitment to improving instruction and personalized learning is also reflected in the Strategic Plan. Practices that will inspire lifelong curiosity through collaborative problem solving and authentic learning are now part of the District's teaching and learning plan.
- Commitment to a holistic, connected approach is another key objective. By supporting STEM (Science Technology Engineering and Math), Engineering, Fine and Performing Arts, and other electives, the District's goal remains creating pathways that enable students to explore and pursue their interests and passions, while contributing to the overall good of the community. Extracurricular activities in the arts, athletics, and other enrichment areas will be made available to all middle school students and will support the holistic approach.
- The goal of creating a culture of care, inclusion, and safety for every student and their family in the Norwood Public Schools will be a hallmark of the educational future of the Norwood Public Schools.

This Education Plan is directly tied to two of the District's strategic initiatives to create facilities that are centers for innovation and comprehensive educational experiences, and that will foster and promote problem solving and creativity for both staff and students within a safe environment:

- District's Strategic Objective #2: Facilities and Operations; Create facilities that are centers for innovation and comprehensive educational experiences, that will foster and promote problem solving and creativity for both staff and students within a safe environment.
- District's Strategic Objective #5: Safe and Supportive Schools; Through the implementation of social emotional learning and culturally relevant and trauma informed practice, create a culture of care, inclusion, and safety for every student and their family in the Norwood Public Schools.

# Technology Plan

Norwood has also established a Technology Plan, with the vision of creating a technology-rich teaching and learning environment that encourages collaboration, communication, innovation, and achieves academic and professional proficiency for all students and teachers respectively. This plan aims to enable students and teachers to use technology to:

• Enhance teaching and learning to meet the learning needs and

styles of all students

- Engage in learning anytime, anyplace
- Procure, research, organize and share information
- Think critically and solve problems
- Innovate and create new ideas
- Express themselves effectively and creatively
- Collaborate with other students and teachers anywhere in the world

This plan is further supported by the Strategic Plan, which aspires to build a technology ecosystem that is equitable, collaborative, alwayson and available everywhere. The Technology Plan is available on the District website.

# Fall 2020/Winter 2021 Educational Visioning

Beginning in the Fall of 2020, the Coakley Middle School community participated in a series of educational visioning sessions for the proposed new middle school. Participants included representatives of the Town, School Committee, parents, residents, educators, and staff. This process was rooted in the District's Strategic Plan, building upon its core values, and using those as a basis for the definition of a successful project. Themes centered around flexibility and adaptability, creation of environments that support collaboration for both teachers and students, creation of a community resource, technology-enhanced curriculum, and enhanced and inclusive special education and student support.

The successful Coakley Middle School will:

- Be designed to be future-proof by embodying flexibility and adaptability.
- Support self-directed project-based learning.
- Create an environment supportive of social-emotional wellness and learning.
- Link technology, space and pedagogy in meaningful and intentional ways to foster innovation in teaching, leadership and learning.
- Create a haven for a positive, inclusive, diverse learning culture that accommodates students of all needs.
- Enhance, support and strengthen the connections and partnerships that make Coakley unique and vibrant between teams, departments, student services, the high school and the larger Norwood community.

## **B. GRADE AND SCHOOL CONFIGURATION**

The Norwood Public Schools provides educational programs for students in preschool through age 22. As of December 2020, there were 3,641 students enrolled in the Norwood Public Schools. Norwood operates:

- The Little Mustangs Preschool Academy for students ages three and four,
- The Willett Kindergarten Program for all 272 kindergarten students and
- Five elementary schools, grades one through grade five,
- One middle school, grades six through eight,
- One high school, grades nine through twelve.
- One post-grad LEAD program for students who have completed four years of high school but will remain in the Norwood Public School system until age 22, as well as non-diploma students.

Students attend the Norwood Public Schools based on their geographic neighborhoods with some movement between schools based on special education programming.

The Dr. Philip O. Coakley Middle School sits at the center of the educational system in Norwood, accepting students from each of the five elementary schools and preparing the students for entry into Norwood High School or another secondary institution. The staff aims to foster social, emotional, and intellectual growth in a safe, inclusive, and academically rigorous environment. The Middle School incorporates programs that meet the needs and explore the potential of each student. It provides teachers and teaching styles that are compatible with intellectual, aesthetic, social, physical, and emotional growth. This work is done in partnership with the Norwood community, with a collective effort toward developing students into global citizens who appreciate learning. As such, the School also serves as a nexus of community activities; it is a busy civic center for all of Norwood's citizens.

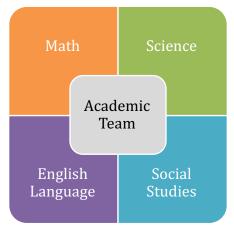
Coakley Middle School currently educates students from grades 6 through 8. The current enrollment of Coakley Middle School is 727 students. Overcrowding is a persistent issue, as there is consistent slow growth in enrollment in the elementary schools. For example, the incoming 6th grade has a class size of 285, while the existing 8th grade has a size of 255. This pattern of increasing enrollment is persistent throughout the elementary grade levels, as the current first grade enrollment is at 285 students. The overcrowding issue is exacerbated by the fact that the current Coakley Middle School, built in 1974, was designed for a junior high school departmentalized model of education. Crowding has been persistent, with temporary modular classrooms being added to the existing Coakley building over twenty years ago to help alleviate the issue. Current best practices, and the current Coakley Middle School model takes a team-based approach. As a result of Norwood's need for a building that supports the educational plan of the School and this steady increase in the student population, the MSBA has authorized Norwood to complete a feasibility study for renovation/ expansion or new construction of a Coakley Middle School that would accommodate the team-based model. The MSBA has also authorized the Norwood Public Schools to build a grade five through eight middle school to better meet the space and developmental needs of all the children of Norwood. This educational plan outlines an educational vision a five through eight middle school.



The use of teams at the middle school is a research-based practice known to have three benefits: it creates a small school atmosphere within a large school setting while allowing for fluctuations in enrollment, it allows for dedicated common planning time for teachers, and maintains a structure that allows for the specific needs of middle school groups to be prioritized.

The current Coakley Middle School has an average enrollment of 750 students. This is a significant jump from the 300 student average at the elementary level. Middle schools use the team-based model to help divide a large population into smaller, more personal groupings. In the team model, each grade is divided into interdisciplinary teams that align students with a small group of teachers that can focus on the needs of the students and create a neighborhood school feel for students and families. At CMS, each grade averages 250 students. Those students are divided into three interdisciplinary teams made up of four teachers (Math, Science, Social Studies, and ELA). This allows each team to work with 80-85 students each year. There are benefits for both students and families in this model. Students are placed in smaller groups that allow for teachers to build strong relationships with students, social emotional learning, and community development while still being able to access the benefits of a larger school (physical amenities, shared staff, scheduling). Middle School students range in age from 10-14 - an age group that is distinctly different from both elementary and high school. Early "junior high" based models forced recent elementary graduates into a very complex system that many are not ready to navigate.

The team-based model is also an effective way to ensure that teachers have consistent common planning time. Currently, teachers at CMS have common planning time every day. This is possible because of the teambased model. The grades and teams are aligned for 5 periods per day (the 4 core subjects and a Mustang Block for Response to Intervention and electives) and have two blocks dedicated for unified arts classes. Since all the students are aligned by team, this "off-team" time occurs simultaneously by grade. This allows every teacher to have one prep and one common planning. Common planning time at CMS is well used. On a six-day rotation, teachers have two curriculum planning days, two team planning days, one administrative/PD day and one student



The academic team is the foundational building block upon which Coakley Middle School is organized.

services day. Our ability to meet the needs of our school population is supported by this comprehensive structure.

As mentioned above, the team-based model allows for the specific needs of middle school students to be met and allows for fluctuations in enrollment. Middle School students have different educational, and community needs than their elementary and high school counterparts. They are not "junior" or smaller versions of high school students. They are educationally and emotionally different. Middle School students do not require the highly restrictive environment of one teacher and one classroom that is typical in an elementary school. The content they are learning is becoming more specialized, and they are beginning to develop their own interest in particular subjects. The team model in grades five and six allows for this growth is a secure setting. Using a two-teacher team in grade five allows students to transition between two teachers focused more deeply on two content areas, but also maintains that elementary feel of a dedicated teacher to a small group of students. In grade six, students are ready to move between more classes but would likely be anxious to traverse a large physical area in a short period of time multiple times a day. The four-teacher team in grades 6-8 allow those transitions to occur in a smaller neighborhood, easing anxiety. By the end of eighth grade, students are ready to launch to a greater level of independence and freedom that comes with high school. That growth occurs over four years and requires the safe and familial atmosphere of a team model.

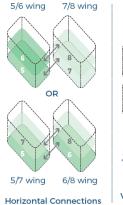
The current team structure of three teams per grade ensures appropriate class size (of 25 or less) for a grade level enrollment of 300 students. Having reviewed the projections for enrollment for the next five years, CMS will increase its grade level enrollment from a current average of 250 to approximately 280 over the next five years. Using the teambased model allows this increase to occur with no additional staff or space needs in the core subject areas. Twelve classrooms per grade level provides appropriate spacing for the student population, even when considering possible enrollment growth.

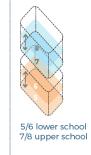
The team-based model for middle school has been shown through research to be a best practice. It accounts for the specific educational and social emotional needs of middle school aged children, helping them grow from elementary students to high school students. It provides the opportunity for common planning time for teachers and maintains a level of flexibility to account for fluctuations in enrollment. A new CMS would need to maintain the current team model that requires 12 core academic classes per grade level.

#### Proposed

The ideal middle school design will separate students into gradelevel academic neighborhoods containing three teams. This will allow for controlled transitions and unstructured time, and create a small school feel, while still allowing for connectivity and collaboration across grade levels and content areas. Additionally, these academic neighborhoods will allow for flexibility with regards to how teams utilize their neighborhood spaces. Flexibility and collaboration were an important focus during educational visioning sessions and will be further delineated later in this document.

Students will still need to move within the school to some central locations within the building for non-core classes (Wellness, Art, Music, STEM, World Language, and Technology Education), but priority goals identified herein include integrating as many topics, activities, and disciplines within the grade-level academic neighborhoods as possible. Space for administrative offices, guidance and nurse services will be located in a central part of the building for easy access, however, to provide more hands-on and interactive relationships between administration/guidance and the student population, CMS is looking to distribute a portion of the guidance and administrative offices throughout the physical school space. This would be an essential component to create a strong school community within a large space. Daily collaborative time is provided to each grade level team of teachers to allow for lesson coordination, professional development, conferencing on the needs of students, and analysis of performance and curriculum data. Space to accommodate Coakley's Professional Learning Communities model is critical to the School's success. Students are heterogeneously grouped, except for grades 7 and 8 math, to maintain high expectations for performance, as well as to allow for role-modeling and scaffolding between students. Many core classes include Special Education students and English Language Learners, who are consistently mainstreamed while being provided with support services. Whenever possible, these support services will be housed within the academic neighborhoods, as well. These classes are often co-taught by two teachers and are considered inclusion.





nections Vertical Connections / Separation

*Configuration options for a 5-8 middle school option* 

# The 5-8 Model

A 5-8 grade model at Coakley Middle School will provide additional services to grade five students, as well as consolidate special education resources into one location. Adding grade five to CMS would add to the grade five students' much-needed Unified Arts classes such as World Language, Technology Education, Project Lead the Way programming, Art, STEM, Music, and other specialties that are part of the Coakley Middle School curriculum offerings. It also allows grade five teachers to collaborate more closely with 6-8 teachers, enhancing the ability of teachers to work on vertical teams to increase student achievement. The 5-8 middle school model provides a longer grade span of years in the same school, reducing the frequency of transitions for this specific student population, which needs additional support and connectivity with fewer transitions. The proposed 5-8 model would be an upper and lower school format, placing grades five and six together and grades seven and eight together both physically and programmatically. This would allow a more traditional middle school model in grades seven

and eight, where students transition for all classes and have access to a larger variety of Unified Arts courses, while still maintaining a team approach. At the same time, this model will provide flexibility in grades five and six. For example, two-teacher teams could be utilized in grade five to minimize transitions and independent movement throughout the building, with students traveling as a static class to Unified Arts. In grade six, the four-teacher team model would be introduced for core subjects and specials, while still minimizing interactions outside of the team neighborhood. At the majority of Norwood's elementary schools, the fifth grade students and staff participate in two-teacher teams. This will not change if we adopt a 5-8 model. The current 6-8 model is based on 4 teacher teams, thus there is no change anticipated regarding the approach to professional development or staffing to support the models. The upper and lower school model further separates older and younger students for lunch, bathroom use, and any other areas where it makes sense developmentally.

#### **Teacher Certification**

Almost one hundred percent of the current 5th and 6th grade teachers have certifications that fall within the following categories, 1-6, 5-12, K-8 or All Levels. These teachers are presently teaching within one of their certification areas and it is not anticipated that this will change if when the District adopts a 5-8 model with "two-teacher" teams at Grade 5. A proposed 5-8 model would not cause any current staff to need to obtain a different certification, unless they choose to for professional advancement purposes or to change their content area. As the District begins to hire additional staff or replace staff who leave, we will be intentional about the certifications required.

#### C. CLASS SIZE POLICIES

#### Current

The Norwood School Committee does not have a class size policy. The current building does not have adequate building space for all classes and programs. The addition of six modular classrooms over twenty years ago has provided some relief to overcrowding and available classroom space, however these structures are well past the end of their utility. At the present time, the Coakley Middle School is at capacity and unable to add additional classrooms or programs due to space constraints. Core subject classes are currently between 22-25 students with an average school population of 750. Unified Arts classes have a much wider range of 20-35 students.

#### Proposed

The proposed space template for grades 5-8 includes 48 classrooms for core instruction. At an eventual enrollment projection of 1,070 students, this would translate into approximately 270 students per grade, and 22-25 students per classroom.

## D. SCHOOL SCHEDULING METHODS

## Current

The school schedule is revisited annually with the Principal and school-based scheduling committee. Adjustments are made based upon enrollment, student and programming needs, staffing levels, and contractual agreements around educator preparation and professional development. As of March 2021, the decision was made that, starting in Fall 2022, the student day will be from approximately 8:40-8:50 a.m. to 3:20 p.m. The Coakley Middle School has an academic schedule that has seven 50-minute periods which includes a Response to Intervention (RTI)/Electives period. The schedule operates on a six-day cycle. All students have a 30-minute lunch and recess, Art, Music (Band/Chorus/ Orchestra/Gen. Music), Wellness, STEM, Technology Education, and World Language. At the end of each day is Mustang Block. During this 50-minute period, students have a choice of electives (two options per year) and also receive a study skills class or RTI period, depending upon the needs of the student. This block is also used for regularly scheduled social-emotional learning (SEL) programs and lessons developed and implemented by our counseling staff.

Based upon the RTI model, students are assigned to teachers in this period to receive targeted assistance in Math or ELA when they need additional support, extra practice, clarification, or enrichment. Students that do not require RTI receive instruction by a variety of teachers that assist and enrich students in academics, social skills, test preparation, goal setting, student and community leadership, or SEL.

The team-based approach with grade level Unified Arts block scheduling allows for teachers to have daily common planning time. This allows for cross-curricular planning, student management, parent meetings, and small group, highly specialized professional development.

# Proposed

The grade five schedule would be based on a two-teacher team model, allowing for longer blocks of time to dig deeper into combined subject areas, engage in project-based learning and retain that developmentally appropriate feel to the students' school day. The schedule for specialist programs will be aligned with the middle school specialist schedule to allow grade five students to take advantage of any potential advanced or extended learning opportunities that may be available in grades six through eight. This also allows for a greater sharing of resources. World Languages would be added to the grade five schedule to enhance the District's proficiency-based language model. World Languages are an essential component of a 21st century education, and integral to Norwood's mission to create culturally competent, global citizens. Enhancing and extending World Language opportunities for students within the 5-8 model is vitally important to create world-ready students who participate in local, national, and international communities, through acquiring proficiency in multiple languages. By starting earlier in grade five and providing more contact hours in grades 6 and 7, all Norwood students will have the opportunity to become eligible for earning the Seal of Biliteracy and becoming truly culturally competent, linguistically proficient, world-ready citizens. The schedule must also include the appropriate staff planning and collaboration time within the established school day. Grade five teachers would also work in the team-based model that allows for daily common planning time.

There will be times when teachers who share the same students will be able to adjust the daily schedule to accommodate project-based and multi-disciplinary instruction that requires longer or shorter periods of instruction. Teaming the same students within common neighborhoods allows for scheduling flexibility for staff. Since students are placed on cross curricular teams, there is flexibility within the "onteam" schedule to do project-based and cross-curricular work.

# E. SPATIAL, ORGANIZATIONAL, AND FACILITY DEFICIENCIES IMPACT

The Coakley Middle School is burdened with physical and mechanical deficiencies that affect the social, educational, and psychological wellbeing of its student population. The dedicated Coakley staff work steadily to combat the effects of these deficiencies on a daily basis.

#### **Antiquated Program Organization**

Organizationally, Coakley Middle School faces a number of challenges. Originally designed to support departmental school organization, the building does not fit the middle school team structure that Coakley (and most modern middle schools) currently employs. Team or "neighborhood" organization of middle schools creates smaller, more personalized learning environments, which foster interdepartmental collaboration and support social-emotional learning. These teams also provide a sense of belonging for students, helping them to foster an identity that unites them with their peers and makes them feel supported and secure. The existing building is not designed to support this teaming structure, and does not provide the neighborhood-based support spaces that make this model truly successful.

#### Substandard Classrooms

The classrooms in Coakley Middle School are rife with deficiencies. They are by and large undersized, overcrowded, acoustically poor and lacking light and ventilation, creating less-than-desirable teaching and learning conditions. Additionally, an overall lack of classrooms limits the number of electives that can be offered. When trying to build a relevant and cohesive educational program, the excellent Coakley staff is often hamstrung by a lack of adequate STEM facilities, which do not have the infrastructure or layout to support the technology and instructional activities typical of a modern STEM program. Modular classrooms, originally added as a temporary solution, have become permanent fixtures, and are not only uninspiring spaces, but physically isolated from the rest of the building. For students and staff, this is their existence for almost eight hours per day. Norwood Public Schools wants to do better for their students and staff.

# Lack of Collaborative Workspaces

Furthermore, as the Coakley Middle School evolves its pedagogy to meet 21st Century Learning criteria, the School has developed STEAM integration, as well as a robust teacher collaboration protocol, and is implementing more project-based, hands-on instruction. The current building layout provides no dedicated spaces for STEAMintegrated work, project-based work, teacher collaboration or student collaboration, which impacts the scheduling of available teaching and meeting spaces.

# Lack of Connectivity and Transparency

The solid-wall corridors and presence of interior classrooms with no windows in the School create a disconnection between what is happening inside the classroom and the rest of the School. Not only does the lack of transparency isolate the classrooms, but it makes the hallways dark, unsupervised spaces, with no vibrancy or connection to the learning happening within the building.

# **Poor Organizational Layout**

The disorienting layout of the school makes security and navigation a challenge. Parents frequently fail to realize where the main office is located, causing a potentially insecure situation with adults able to enter the building unchecked. The minimal and uninviting community spaces sends an unwelcoming message to students, parents, staff and community members. There is an overall lack of opportunity to showcase student work, which is a critical component of fostering a sense of school stewardship, community and identity. Consistent and safe wayfinding, and bright, welcoming spaces are essential to a student's feeling of safety and security in their school environment.

#### **Inadequate Student Support Spaces**

A cornerstone of 21st Century schools is providing students with a support network to help them to be successful. The current Coakley Middle School lacks appropriate spaces for Health Services, Student Services, Special Education and Administration. While Norwood has developed strong programs to provide students with the support they need, the lack of dedicated spaces for these programs in the current building has forced these functions to carve out room wherever they can find it which means they are often housed in remote, disconnected parts of the School, lacking accessible, appropriate spaces for meetings, academic support, testing, and counseling.

#### F. TEACHING METHODOLOGY AND STRUCTURE

The Coakley Middle School is organized into grade-level teams. Each team consists of four core subject teachers (Math, Science, Social Studies, and ELA) with most teams having a dedicated inclusion special educator. This takes our school of approximately 750 students and distributes them into smaller school environments of 80-90 students These smaller, more personalized environments facilitate each. meaningful relationships between students and teachers and ensure that no students fall through the cracks academically or socialemotionally. Each grade level has three teams and our substantially separate programs are all aligned with a grade level team. Full inclusion for all students is Norwood's goal. In the new building, this structure would be retained as it promotes the social and academic well-being of all students, while promoting equity and inclusion. Because the new school will include grade five, the team structure may be modified to reduce the number of teachers for grade five students in order to be more developmentally appropriate.

#### **Teacher Collaboration**

Coakley Middle School has developed a STEAM-integrated, 21st Century curriculum that relies on a robust teacher collaboration protocol in order to implement more project-based, hands-on instruction and to prevent the inadvertent creation of "knowledge silos". The new Coakley will provide two independent Teacher Collaboration spaces to support this protocol at both the upper and lower schools. The collaboration spaces will be utilized by all grade level teachers and support staff. Teachers who are not assigned to a classroom when the school is fully occupied will have an office space within the teacher collaboration room. These spaces will be designed to promote teacher interaction and collaboration with faculty and staff and will include a copier, works surfaces, kitchenette, and other materials and equipment not appropriate to the classroom setting. These spaces will be essential to supporting activities for curriculum planning, small seminar meetings, informal and spontaneous gatherings, conference areas, and

Aligns with Strategic Plan Initiative 3.1.1 - Provide teachers with routine professional learning time to analyze student data, review long-term plans and collaborate with peers. collaborative work areas.

### **Student Collaboration**

Student collaboration and project-based learning are foundational concepts to 21st Century learning. Student collaboration areas would create space for gatherings or for activities that would be limited or not possible in the classroom setting. For example, in grade 8, students read A Midsummer Night's dream. To increase student engagement and create an experiential learning opportunity, the three grade 8 teachers have students perform the roles. Currently, the three classes cram into one classroom, which only allows for a very small performance space. In a student collaboration space, small groups could each take a scene, practice and design their portion of the play and have ample space to perform and watch their classmates perform. Likewise, World Geography Day is when all seventh grade students do a project on a country and display their work for students, faculty, and community personnel. The open layout of the planned student collaboration spaces would be more conducive to the collaborative creation, as well as display of student work than a typical classroom. Additionally, on a daily basis these spaces could be used for small break out groups, testing, alternative workspaces, and places where students might work 1:1 with a teacher or provider.

# **Curriculum Delivery**

The following chart outlines the curriculum delivery and basic methodology that is currently in place in Norwood for grades 5-8. This will be followed by more detailed descriptions and proposed changes that would be facilitated by the proposed new middle school.

## English Language Arts (ELA)

The reading curriculum is based on the standards outlined in the Massachusetts Curriculum Frameworks for ELA and Literacy. Both system-wide and site-based professional development focus on the skills and concepts for reading comprehension and the analysis of complex texts. Coakley Middle School teachers utilize novels, anthologies, periodicals, eBooks, digital materials, and 1:1 technology for instructional purposes. Text genres include novels and short fiction, drama, poetry, oral tradition, and nonfiction. Teachers assess comprehension through tests and quizzes, project-based learning (World Savvy), and text-based open response, narrative, and essay writing.

Literacy standards for writing, grammar, and vocabulary are also directly aligned to the Massachusetts Curriculum Frameworks for ELA and Literacy. ELA teachers plan instruction around common themes, providing students with a strong connection between what they are reading, writing, speaking, and listening about in class and the world in which they live. ELA teachers use common resources, aligned to the new state standards, to develop lessons and assessments that support the theme or unit.

No major programmatic changes are proposed for the ELA program. Enhancements that a new building could provide that would better suit a project-based and literary focused curriculum would be:

- Adjustable lighting for reading and performance
- Flexible and moveable seating to allow for multiple configurations, done with ease and minimal disturbance or loss of learning time
- Multiple in-room charging stations to meet the demands of Norwood's 1:1 technology model
- Storage both in the classroom as well as a dedicated book room, to enable teachers to use a large variety of texts.
- A small, shared-use Performance Technology Studio could be used by the ELA department to bring plays and other literary texts to life, while also providing small performance spaces for drama, music and other core and unified arts performances.

# The Performance Technology Studio

The Performance Technology Studio would be a shared space with several other disciplines, including ELA, History, World Language, and Fine Arts. Currently, each grade level uses two or more performance-based texts each year. The Performance Technology Studio could be used when grade 8 studies A Midsummer Night's Dream over the course of four weeks. Grade 7 studies A Christmas Carol over a sixweek time period. For both of these units, the Studio could see daily use by three teachers, each teaching four sections. The space could be shared at times or signed out for small class uses such as poetry readings and performance. Additionally, each grade level does a unit on poetry. The Performance Technology Studio could have a utilization of

# Curriculum Delivery Chart

Content Area	Grade Level	Time on Learning per Week	# of Staff	Teaching Methodology	
ELA	5	450 minutes	13	Balanced literacy model of integrated reading, writing, and research, using high-quality standards aligned with curriculum materials. Whole class and small group instruction; classroom library and centers. Integrated with History/Social Studies and Science, Technology and Engineering (STE) content.	
ELA	6-8	250 minutes	9	Whole class and small group instruction; desks or tables used for writing, conferencing, and editing. Co-teaching model for Special Education.	
Mathematics Mathematics	5 6-8	375 minutes 250 minutes	15 9	Whole class, partner work, and skill group instruction and center. Technology is used daily for individual online practice, instruction or assessments, use of online content and personalized materials.	
Science	5	Approx. 100-120 minutes	Same staff that Teach Math	Whole class, partner work. Hands-on/lab learning with two K-5 science specialists. Much of the content is delivered online and supplemented with readings. Moving to a new Next Generation Science Standards (NGSS) curriculum and delivery model that is inquiry-driven and with more hands- on learning and outdoor investigations and learning.	
Science	6-8	250 minutes	9	Whole class, partner work, collaborative groups, and lab investigations. Technology is used daily for online demonstrations and interactive assignments, integrated use of science phenomena, inquiry, and science practices. Electronic measurement devices may be utilized in the data collection process. Student lab surfaces are used for carrying out scientific investigations.	
Social Studies	5	Approx. 120 minutes	Same staff that teach ELA	Whole class instruction and small group work. In the process of identifying a new standards-aligned K-5 program that supports investigations using a variety of print and online resources and project-based learning. Integrated with ELA and STE programs.	
Social Studies	6-8	250 minutes	6	Whole class and collaborative groups; desks or tables for research and project planning; technology used for research and non-fiction analysis, multimedia presentations and student work.	
World Language	6-8	Grade 6&7: 150 min Grade 8: 250 min	1.5 FR 3.5 SP		
Technology Education/ Pre- engineering	6-8	150 min for one semester	2	Whole class, collaborative groups, and lab settings; technology is used daily for online demonstrations and interactive assignments; computer lab used for research, construction tools (drill press, assorted saws, glue guns, and hand tools) are used by used by students in developin solutions while carrying out the engineering design proble solving steps. project-based learning or "design challenges are the major assessments for all courses.	

Content Area	Grade Level	Time on Learning per Week	# of Staff	Teaching Methodology	
Wellness	5	40 min periods 2/week		Phys Ed (1/week): Whole class and small groups, indoors and outdoors. Health (1/week): Direct Instruction; Whole class and small groups.	
Wellness	6-8	150 min for one semester	3	Phys Ed: Whole class and small groups; Simulation and active teaching; Cooperative learning; Physical Literacy; MA State Frameworks Health: Lecture/Direct Instruction; Whole class and small groups; Peer/Cooperative Learning; project-based Learning; technology used regularly to supplement classroom in- person instruction; Health Literacy; MA State Frameworks	
Art	5	40 min 1/week		Whole class, small groups and individual teaching methods are employed. Technology is used in every class for demonstrations, visual research as well as displaying examples. The curriculum is taught through hands-on art making using a wide variety of media and techniques. Students use water-based materials as well as sculptural elements such as clay.	
Art	6-8	150 min for one semester	2	<ul> <li>Whole class, small groups and individual teaching method are employed. Technology is used in every class for demonstrations, visual research as well as displaying examples. The curriculum is taught through hands-on art making using a wide variety of media and techniques. Students use water-based materials as well as sculptural elements such as clay.</li> </ul>	
Music	5	40 min 1/week		General Music. Band, Chorus, Orchestra.	
Music	6-8	150min	2	The current Coakley Middle School model includes Band, Chorus, Orchestra, and General Music classes. Music classes are taught by one Instrumental Music (Band, Orchestra, and General Music) teacher (1.0 FTE) and one Choral music teacher (1.0 FTE).	
Instructional Technology	6-7	150 min for one semester	1	Student-centered classroom through self-paced online playlists, created by the teacher, containing all resources and teacher created tutorials. Teacher monitors, guides and assess students through the course. Computer lab for software application. Students also work in a lab setting using lab tools in collaborative groups to apply their learning by building prototypes of technologies they see in the world around them and coming up with their own inventions. Technology is an integral part of the curriculum.	

six periods per week by the ELA department. The chart below outlines a conservative estimate of use for the Studio, based upon each grade level (which is comprised of 12 sections) having access twice a week. In a 5-8 model, this usage would increase by 4-6 additional periods of use. This usage estimate would also allow for use by Unified Arts classes, such as Chorus. This space would also be used by the robust Drama program that currently performs two plays and one musical each school year.

Period/ Day	Monday	Tuesday	Wednesday	Thursday	Friday
1	6 ELA		6 ELA	7 SS	
2	6 WL	8 ELA	7 WL	8 ELA	8 WL
3		6 WL		7 WL	8 WL
4	7 ELA	8 WL	7 SS		7 ELA
5	6 SS	8 WL	6 SS	Chorus	
6	Chorus	8 SS			8 SS

Performance Technology Studio: Average Weekly Use by Subject

#### Math

The Coakley Middle School Math curriculum is aligned to the current Massachusetts Curriculum Framework. Teachers follow curriculum maps for the grade 6 math, grade 7 Pre-Algebra, grade 7 accelerated Pre-Algebra, grade 8 Intro to Algebra, and grade 8 accelerated Algebra 1 courses for common pacing, alignment, and assessments. Advanced Math will only be offered in 8th grade starting in the fall. Parents have the option to opt out if desired. Parents may also request an override if their child was not selected for the accelerated math program. Approximately 35% of grade 8 students take accelerated math. Second Honors is required to be enrolled in Advanced Math. There will be an additional opportunity for students to enroll in Advanced Math in 9th grade, even if they were not enrolled in 8th grade.

Each 6 - 8 Math classroom is equipped with materials and resources from the Big Ideas Math program. Teachers and students have access to textbooks, as well as online digital resources, practice journals, and assessments. Every Math classroom is equipped with a computer, projector, and access to the internet for interactive whole class lessons including the Google classroom suite, Desmos, and other Math programs. All students have been provided Chromebooks for in class and home use.

No major programmatic changes are proposed for the Math program. Coakley Middle School will continue to add opportunities for projectbased and blended learning work to increase student centered learning and move away from teacher directed. Additions that a new school could provide assistance within a standard classroom are:

- Multiple workstations with computer access to enable small group self paced learning,
- Access to multiple outlets or charging stations,
- Access to whiteboards to work out problems in a group,
- Moveable and flexible furniture that facilitates collaboration.

# Science

The Coakley Middle School Science teachers have developed and implemented grade level Science content units, which focus on the observation of science phenomena, inquiry, and science practices. All units are written to engage students in the current science content and science practices standards. Each grade level uses a variety of digital and printed text resources to support experiential learning. Small/ pair groups engage students in scientific practices through hands-on activities, collaborative projects, simulations, and science inquiry. The use of video clips, online demonstrations, and media-rich presentations, as well as hands on data collection, dominate the student experience.

All the larger Science (STE) rooms are designated grade level classrooms that would be used in the same manner as the smaller grade 5/6 rooms. The benefit of having 3 Science labs per grade level would allow for all grade 5 and 6 students to have the appropriate space for hands-on Science labs and experiments. In grade six, classes are departmentalized and students would rotate into the lab on a daily schedule. In grade five, the grade 5 teachers would use common planning time to outline the Science pacing and plan, allowing classes to "swap spaces" as needed in order for students to use the lab facilities for those Science classes that need a larger space and access to a sink. At grade five, Science is daily but involves less intense lab activities than grade 6 through 8 where lab space is needed several times per week. As Coakley Middle School expands Project Lead the Way to grade five, these spaces would also receive higher utilization for these hands-on project-based activities.

While the Coakley Middle School Science program continues to move towards hand-on, inquiry-based units of study, there are several equipment, safety measures, and furnishings that would allow for a more project-based learning program:

- Durable magnetic and writable surfaces to allow for groups to spread out throughout the classroom and not be confined to sharing a single desk or white board in front of room.
- Storage space to accommodate problem-based learning projects that continue for an extended period of time and may require ventilation or element containment.
- Eight lab stations equipped with sinks, towel dispensers, counter space, electrical outlets.
- Adjustable lighting and access to outdoors for earth science related activities. Designated lab and learning spaces with movable adjustable furniture to allow for collaboration.
- Access to outdoor learning spaces to allow for project-based outdoor learning.

## Social Studies (Civics/World History)

The Coakley Civics and World History curricula are based on the current History and Social Science standards outlined in the Massachusetts Curriculum Frameworks. Geography, Ancient Civilizations, and Civics are major themes highlighted throughout middle school. Primary sources, periodicals, virtual tours, field trips, web-based research, and teacher-created lessons all contribute to the design and implementation of the Social Studies curriculum. Using primary and secondary sources, students engage in critical thinking as well as evidence based writing, continuously improving on their analytical writing skills. In both system- and site-based professional development, teachers share best practice and supplemental resources. Using the middle school team model, the Social Studies department is often integral in the design of interdisciplinary units that connect history to current events, usually with a social justice lens, and provide students the opportunity to process through writing or discussions. Some examples of classroom practices include virtual reality for students to view other places around the world, discussions connecting historical moments with cultural ideas, and collaborative, student-led inquiry to solve problems or create understanding of events and cultures. The goal is to build active and engaged citizens through the English Language Arts and Social Studies curriculum. This would help to facilitate district strategic objective 3.5 "Leverage technology to optimize teaching and personalized learning and increase student engagement".

There are no proposed changes to the current Civics/History program outside of increasing the opportunities for students to engage in project-based learning. Aspects of the new building that would help facilitate the program would be:

- Flexible seating and tables for collaboration,
- Multiple workstations within the classroom to allow for small group instruction and station work,
- Access to a virtual reality lab where students could visit other countries from their school.

# Virtual Reality Lab

The Virtual Reality Lab would be a shared space with several other disciplines, including ELA, History, World Language, computers, math, and science. Currently, the grade seven social studies curriculum includes several units that use our current grade-level set of virtual reality equipment. Students are able to travel to the countries they are studying without leaving their seats. This is an optimal way to connect geography with the study of the countries. Science, computers and STEM could also use this to look at virtual models and conduct experiments that are unsafe in a school lab. Math would be able to see real life application of higher level algebraic models come to life. The technology around VR has improved significantly over the past few years and can create "hands-on" experiences that were not possible in

the past. A dedicated lab that could be used by multiple subject areas would allow for greater expansion of the use of "real" experiences happening in the classroom. The grade seven team currently uses a single classroom set of VR goggles 4-5 times per year. With access to a more comprehensive virtual reality lab this use could be expanded to monthly and expanded to all grade levels.

Period/ Day	Monday	Tuesday	Wednesday	Thursday	Friday
1	6 Math	6 STEM	6 ELA	7 SS	Grade Five
2	6 WL	8 Math	7 WL	8 SCI	8 WL
3		6 WL		7 WL	8 WL
4	7 Math	8 WL	7 SS	7 STEM	7 SCI
5	6 SS	8 WL	6 SS	Computers	
6	Computers	8 SS	7 STEM		8 SS

#### Virtual Reality Lab: Average Weekly use by Subject

#### World Language

World Languages are an essential component of a 21st century education, and are integral to the mission to create culturally competent, global citizens as described in both The Norwood Public Schools Strategic Plan and The Portrait of a Norwood Graduate. The 2021 Massachusetts World Language Framework calls for a robust preK-12 program that allows all students multiple entry and exit points to first build, and later demonstrate, their proficiency in multiple languages. Massachusetts has adopted the Seal of Biliteracy, an award provided by state-approved districts (including Norwood) that recognizes high school graduates "who attain high functional and academic levels of proficiency in English and a world language in recognition of having studied and attained proficiency in two or more languages by high school graduation. It is awarded upon graduation and is a statement recognized by future employers and for college admissions." The Seal of Biliteracy requires that students will meet, as a minimum, the Intermediate-High proficiency level as determined by the American Council for the Teaching of Foreign Languages. To move through each level of proficiency, 135 contact hours /year are required. Currently, the grade 6 and 7 models only provide students with 81 contact hours. which is not enough to attain the Novice-High level. This impacts our students as they move through our World Language Program.

At CMS, World Language has gained significance over the past ten years as a required academic subject for all students. The world and the workplace are becoming increasingly global and a student's ability to obtain a high level of proficiency in a World Language is a clear asset as they head to careers and college. This process begins at the middle school level. For students to have a full immersive experience in a Spanish or French requires those educators to be able to create spaces that reflect the learning that occurs. The current

research on the benefits of immersive learning for English Language Learners supports this claim. When World Language teachers can create spaces for World Language, they can use practices outlined in Sheltered English Immersion such as labeling common items in the target language, posting word walls with consistently used vocabulary. and providing a space that illicit enthusiasm for the cultures that speak the target language. When World Language teachers must share space with a core subject teacher these opportunities are limited. A teacher that teachers five blocks in a single space is going to use much of the space for the content area that they teach, leaving little room for the World Language teacher to post content. Additionally, sharing space means that World language teachers would be in 4-5 different spaces each day, limiting their ability to post content and room enhancements in all those spaces. By dedicating spaces to World Language, we are indicating the importance of the content area and allowing teachers to flourish and grow a love of languages and cultures.

Coakley Middle School would look to enhance and extend World Language opportunities for our students by include grade five. Including grade five students in the World Language program within the 5-8 model would facilitate the development of world-ready students who participate at local, national and international levels. Starting earlier in grade five and working to increase contact hours in grades 6 and 7 allows all Norwood students to have the opportunity to become eligible not only for earning the Seal of Biliteracy but also for truly becoming culturally competent, linguistically proficient, world-ready citizens.

The design needs for this program would include:

- Four World Language classrooms that allow for group work and collaboration,
- A small collaboration space for World Language teachers
- Flexible seating and multiple stations for learning,
- The World Language program would benefit from both a Virtual Reality Lab and a Performance Technology Studio.

These spaces would be used to accommodate six World Language teachers, each teaching five sections per day. With 250 students per grade and 20-22 students per section, that amounts to 12 sections. The table below illustrates the utilization of the four classrooms:

Period	Classroom 1	Classroom 2	Classroom 3	Classroom 4
1	Grade 6/	Grade 6/	Grade 6/	Grade 6/
	Grade 6	Grade 6	Grade 6	Grade 6
2	Grade 6/	Grade 6/	Grade 5/	Grade 5/
	Grade 6	Grade 6	Grade 5	Grade 5
3	Grade 7/	Grade 7/	Grade 7/	Grade 7/
	Grade 7	Grade 7	Grade 7	Grade 7
4	Grade 7/	Grade 7/	Grade 5/	Grade 5/
	Grade 7	Grade 7	Grade 5	Grade 5
5	Grade 8	Grade 8	Grade 8	Grade 8
6	Grade 8	Grade 8	Grade 8	Grade 8
7	Grade 5/ Grade 5	Grade 5	Grade 5/ Grade 5	Grade 5

#### World Language Classrooms Daily Utilization Chart

Grade 6 and 7 have World Language every other day. All classes could occur in World Language designated rooms. Grade 8 has World Language every day. Four sections would need to be held in general education classrooms.

The World Language collaboration space is a small teacher collaboration space where teachers not currently teaching could work on developing lessons and collaborate with other World Language faculty and/or specialist teachers. This would also be a space for shared storage of materials for World Language, allowing us to remove teacher desks and unused materials from classroom spaces. It would also allow for the better storage of student projects in shared classrooms

The Performance Technology Studio will be used by World Language students and teachers to meet the American Council on the Teaching of Foreign Languages (ACTFL) Can Do Standards for Presentational Speaking. Students will be able to do skits and give presentations, fostering creativity and meaningful use of the target language. We will also be able to have guest speakers teach about culture and other relevant topics such as careers in World Languages, which will spark curiosity and excitement for learning a world language. Performing skits in the target language is a weekly occurrence in a World Language classroom. Adding a theatrical element to these role plays would allow for more developed writing and rehearsed performances which would help support spoken and written language development. Please see the Performance Technology Studio Average Weekly Usage Chart for average world language utilization.

The Virtual Reality Lab will be used by World Language students and teachers to meet the ACTFL Can Do Standards for Cultures. Students can explore foreign countries through Virtual Reality, providing an engaging, student-centered experience. This provides equity, as not all students are able to afford trips abroad, and gives exposure to all students. Students will be able to use their language in meaningful ways, as well as reflect and compare different cultures.

# Academic Support Programming Spaces

#### Current

There are only two designated academic support spaces for 9-10 academic support sections. Many teachers use general education classrooms, storage spaces, and other less desirable spaces for small academic support spaces.

# Proposed

The proposed spaces would be designed to be an integrated part of the general education teams, and would be accessible by neighborhood. In addition to being used for academic support, these spaces can be used for small group testing, break-out groups for projects, and many other integrated opportunities with general education classes.

# Student Guidance and Support Services

Space for guidance will be located in a central part of the building adjacent to the main administrative office for easy access, however, to provide more hands-on and interactive relationships between administration/guidance and the student population, CMS is looking to distribute a portion of the guidance and administrative offices throughout the physical school space. This would be an essential component to create a strong school community within a large space. Students are heterogeneously grouped, except for grades 7 and 8 math, to maintain high expectations for performance, as well as to allow for role-modeling and scaffolding between students. Many core classes include Special Education students and English Language Learners, who are consistently mainstreamed, while being provided with support services. Whenever possible, these support services will be housed within the academic neighborhoods, as well. These classes are often co-taught by two teachers and are considered inclusion.

# G. GRADE FIVE EXPERIENCE

Currently, all grade five students attend one of five neighborhood elementary schools. The key elements of the grade five program are critical thinking, problem solving, and hand-on learning experiences through increasing amounts of project-based learning. Recently, the elementary schools have adopted a new ELA program and are in the sixth year of using the Envisions Math program. Both align with the values mentioned above. Foundational elements of the grade five experience go beyond the classroom. Grade five students are considered leaders and role models in their schools and are provided with multiple opportunities to work with the younger grades. Towards the end of the academic year, several long standing traditional events occur to celebrate the end of grade five. These include field day (done at CMS with all grade five students together), promotion ceremonies, town-wide and grade level musical concerts, student government and service projects. The backbone of the educational plan for grade five revolves around Literacy and Math. Science and Social Studies occur less frequently. Science is supported through district-wide science coaches, as are ELA and Math. Social Studies varies greatly between the five elementary schools, with regard to both time and content covered. Currently, many grade five students are already experiencing a more departmentalized version of grade five, as teachers are teaming up to share content responsibilities. A transition to a team-based approach would not be a significant shift for students.

With a 5-8 middle school model, many of the aspects of the neighborhood elementary will change. Grade 4 students become the leaders, and may take on many of the traditional roles and celebrations. Grade five students become mentees and the youngest members of a larger school population. Some events would remain consistent - the Geography bee, music concerts, student leadership, and service projects are all a part of the middle school model. Additionally, several areas of the grade five experience would be enhanced: grade five teachers would have access to content specialists in all four core subjects; time could be more evenly divided between content areas; there could be improved collaboration between grade five teachers and 6-8 colleagues to enhance curriculum development. Students would also have access to a greater variety of Unified Arts classes - including dedicated STEM and technology classes, Project Lead the Way (PLTW) courses, and World Language. The elementary schools would also benefit from more space, while grade five teachers would benefit from more time for collaboration.

#### H. TEACHER PLANNING AND COLLABORATION

Through the use of a team-based model, Coakley Middle School is able to provide every teacher in the building two non-teaching blocks per day - one for prep and one for common planning. Team teachers have designated common planning time (CPT) every day. For each six-day cycle they have two curriculum-based meetings with department colleagues, two team-based meetings, one meeting with guidance and Special Education staff, and one meeting with administration, which is used for professional development. Unified Arts teachers have three designated common planning meetings per week - two with department colleagues and one with administration for professional development. This model allows for collaborative approaches to learning, as teachers have weekly time to develop and modify instruction, continuous professional development on topics connected to the school improvement plan, as well as designated time to look at students data, discuss at-risk students, and create action plans. Vertical planning occurs twice per month on designated faculty meeting days, as well as on department dedicated half-days throughout the school year.

These time periods allow for grade 6-8 (and at times grades 6-12) to create vertical units of study, as well as allow for larger cross-curricular planning. Currently, there are no designated teacher planning spaces at Coakley Middle School. CPT meetings take place in unused classrooms, areas of the library, and anywhere else teachers can find a space.

The grade five schedule would also use a team approach in order to provide daily common planning time. Grade five teachers would develop a similar CPT schedule to the 6-8 model currently in place.

There would be a need to create designated planning spaces for teachers in a new Coakley Middle School. Each grade level will be housed in an academic neighborhood, providing opportunities for students and staff to work in a horizontal and vertical interdisciplinary manner that fully integrates Special Education and project-based learning. The teams would also incorporate co-teaching sub-teams, particularly across the Math/Science disciplines and the ELA/Social Studies disciplines. This should include the creation of team collaboration areas within the gradelevel academic neighborhoods. Each grade level neighborhood and it's included teams should include the full integration of Special Education through the incorporation of SPED classrooms and English Language Learner support services. The goal is to integrate these services into the neighborhoods as much as possible, while remaining mindful of the fact that some of these services (i.e., severe special needs) may require balancing the distance between two grade level neighborhoods. Integrating Special Education services into the neighborhoods will allow the Special Education teachers to become part of a co-teaching solution, and to work collaboratively with the other teachers and teams in the neighborhood.

The grade five neighborhood should be similar to the grade 6, 7, and 8 neighborhoods, as keeping all academic neighborhoods as flexible and interchangeable as possible will allow for variations and flexibility in future use. However, the grade five neighborhoods should recognize the need for further subdivision into two-teacher teams to reduce transitions. The Upper/Lower School model for the 5-8 option was developed in recognition of the need to keep grade 5 somewhat separate from grades 7 and 8, while still capitalizing on the developmental similarities of grade 5 and 6 students. The staff and administration felt that, although the grade 5 educational program will differ from grade 6, there were organizational and social benefits to allowing these two grade levels to mix freely. This design will balance the need for some separation with the benefits afforded by a 5-8 middle school, being careful not to totally isolate grade five.

#### I. LUNCH PROGRAMS AND DINING

#### Current

The Coakley Middle School offers three lunch blocks during a typical school day. Currently, all students eat in one large cafeteria. Grade 6

students begin lunch at 10:08 am, grade 7 students eat at 11:00 am, and grade 8 students eat at 11:52 pm, with all lunches over by 12:32 pm. The Coakley Middle School coordinates the overall normal day schedule into seven periods. Each day includes four academic offerings and two unified arts offerings and an elective period. This approach allows one thirty-minute period for lunch, including the travel time needed for a student to get to the cafeteria from their classroom or learning space. There is time built into the schedule after each lunch block for students to proceed to their next class. During the latter half of the lunch period, students are allowed to go outside for recess. The close proximity of the football fields allow students to walk the track, play games, and get fresh air during their lunch period. This short break has increased students' attention and productivity after lunch.

Dining staff and Administrative staff associated with supervision are constrained by the cafeteria schedule from 10:08 am to 12:32 pm daily. With 20 minute breaks between each lunch block, the day is disjointed for those on duty in the cafeteria.

It should also be noted that the Coakley Middle School is used throughout the summer as a designated school lunch summer program location. Children under the age of 18 can come to the Coakley each weekday during the summer to receive and eat meals.

# Proposed

The proposed Coakley Middle School will provide two (2) lunch seatings. The Cafeteria/Dining Space is intended to be subdivided and used for two (2) 275 seat student dining areas - one for grades 5 and 6 and one dining space for grades 7 and 8. In addition to these two dining commons, a third, smaller dining space will be carved out of the allotted dining square footage. This space will provide a quieter environment, suitable for smaller groups, students with sensory issues or experiencing recent trauma, or simply students wanting a quieter environment. This space could also serve as a place to provide therapeutic components to Coakley's sub-separate programs with high social-emotional needs with trained staff (SAC, Social Workers, Paras, etc.), with the goal of meaningful inclusion for all students.

There are advantages to having more than one cafeteria. Providing two larger dining commons and a smaller, quiet dining space would provide greater flexibility in scheduling by allowing the school to seat multiple teams for lunch consecutively and reducing the overall "spread" of the lunch period. Ultimately, this would open up the daily schedule and provide more flexibility. Two cafeterias also allows for one space to be used for dining while another is being used for a project, meeting, or special program. Additionally, for morning supervision, students arriving to school early would be able to report to the appropriately assigned dining space.

With lunch consuming smaller windows of time in the daily schedule,

the cafeteria spaces will be available for many other uses, such as team meetings, small group or grade level assemblies and cultural events. Audio and Video conferencing capabilities with movable chairs and tables would allow the School to take full advantage of the square footage usually unused in many schools for long periods of the day.

The new dining spaces should provide a safe and comfortable space for all students. Design of the spaces will fit within the context of the other learning spaces nearby, with appropriate sound proofing and easy access back to classrooms or ancillary learning spaces. Ideally, easy and safe access to an outdoor play or garden area would benefit students and staff and would be needed to maintain the current recess time built into the lunch schedule.

Student-grown foods, supported by both the educational program as well as the community, could be integrated into lesson plans and the school lunch programs. The gardens could be integrated into the desired requirement for outdoor learning and indoor/outdoor connections and could become an integral part of the exterior site design. This immediate source of food production would serve to strengthen the link between healthy fresh food production and consumption in support of the School Wellness Policy. It could also provide an added opportunity for community, business, and neighborhood connections.

# J. ACCESS AND SECURITY

The security design of the new Coakley Middle School will build upon the current safety and security design of the other buildings across the District. Cameras will be placed throughout the inside and outside of the building and will be tied into the central camera recording system and software for the District. All exterior doors will be electrified, along with specified interior doors and tied into the district-wide access control system currently in use in other buildings. The security equipment that will be put into place will be designed to be non-intrusive to student learning, while also creating a safe environment that can be secured and monitored both from a central command center and inside the school itself. This equipment will include:

# • Access Control System

All exterior doors and a select amount of interior doors will be electrified, and will be controlled by the same access control system used throughout the District. Staff members will receive identification key cards that will provide access to their building. Specific access schedules will be assigned to staff members based on their job type and access needs. The doors will also be connected to multiple panic buttons in the school, police station and Central Office Command Center, in case of emergency and need for remote lockdown.

# • Security Camera System Security cameras will be installed around the entire outdoor

Aligns with Strategic Plan Initiative 2.4 - Sustain and improve the necessary safety measures and procedures that promote safe learning environments. perimeter of the school building as well as in entryways, hallways, stairwells, and other select high-traffic interior areas of the school. The School will work with school administrators, school resource officers and the Facilities Department to identify and select the areas in need of security camera installation. Access to the cameras will be given to a select group of administrators and installed on select computers in the School Dependent. All cameras will be tied into Norwood's district camera system, in which a minimum of 30 days of recording will be stored. Access to the camera system will also be available in the Facilities Command Center, as well as the dispatch command center in the Norwood Police Department.

## • Intrusion Detection System

The School will also include an intrusion alarm system that includes motion detection, window and door contacts. Multiple alarm zones will be set up around the building with keypad panels. Access to security codes will be given to specific employees dependent upon job function and access needs. When an alarm is tripped, a notification will be sent to the Norwood Police Department, as well as to members of the town-wide Facilities Department and school administrators.

• School Emergency Notification System

The School will install an emergency notification system that will interface with the VOIP phone system, PA system and school computers, which will allow for emergency notifications to reach the entire school population instantly in the event of a school emergency, lockdown or evacuation event.

# K. PERFORMING ARTS

The current Coakley Middle School Performing Arts model includes Band, Chorus, Orchestra, and General Music classes. All classes align with the 2019 Massachusetts Arts Curriculum Frameworks (Create, Perform, Respond, Connect). The three year program includes the arts as a vital component of each student's education, while providing an environment for students with various strengths and learning styles. The Coakley Music program encourages students to discover music by providing opportunities for self-expression and using music as a method of communication, while helping students understand the role of music in culture and history. Music education builds self-discipline and promotes self-esteem. At Coakley Middle School, Music classes are taught by one full time Instrumental Music (Band, Orchestra, and General Music) teacher and one full time Choral Music teacher. The Coakley Middle School has an exceptional and long-standing Music program, with five extra-curricular music ensembles available to students: Honor Band, Honor Orchestra, Honor Chorus, Jazz Band, and the Norwood High School Marching Band (open to 8th grade students only). Band and Orchestra students also participate in after school lessons on site with contracted studio teachers. Currently, there are no classrooms

for the Instrumental and General Music classes. Band, Orchestra, and General Music are taught in the Auditorium, which is not adequate as a teaching space as it lacks appropriate lighting, technology, safety measures and teaching tools. Band class sizes range from about 40-90, Orchestra class sizes range from 20-40, and General Music class sizes range from 15-35. The Instrumental program is seeing an upward trend in enrollment. Chorus is taught in the Chorus classroom. The Chorus classroom lacks the appropriate size and space to accommodate the large class sizes it holds, usually around 45 students per class. Students currently sit in chairs on risers with only one to two inches of space between each seat. Appropriate and adequate space for both curricular and extracurricular programs are a necessity. Space is also required for the Coakley Middle School Drama program (including Drama Club, fall theater productions, and spring musical theater productions). The current classrooms / Auditorium space are not adequate for the current program, given their size. The lack of adequate storage space has led to Practice Rooms being utilized as storage, rather than for individual/ small group practicing or lessons.

An expanded Music program is proposed. Expanding the program to include an Orchestra teacher would allow for smaller sections and more teacher availability to enhance the existing music program. Performing Arts spaces should be located near the front of the building for easy access to the public for performances and events, while allowing for greater security in the remainder of the building. Needs for this program in the new middle school building include:

- A General Music/Chorus classroom with risers and chairs for students to sit and stand easily, shelves for students' music folders, a piano, white boards and SMART board for use of music-based technology programs.
- Large Instrumental Classrooms for Band and Orchestra with high ceilings, windows, doors to the exterior of the building (for loading equipment on buses when traveling to festivals/ performances), easy access to the Stage, sound tiles, tile floors (if high ceilings and acoustics are taken into account), a large sink for instrument cleaning/maintenance, musicians chairs and music stands, white boards, SMART board.
- A Performance Auditorium<sup>2</sup> with a large Stage with enough space to fit 80-90 students with chairs, music stands, percussion equipment, and instruments, OR 140-160 singers on choral risers. It should include state-of-the-art curtains, lighting, sound, and recording equipment. The audience capacity would need to seat the performing students while not on stage as well as parents/ families which would require 500-700 seats. The Auditorium would also provide space for Orchestra classes.
- 2 smaller sized Practice Rooms with a piano for Music students to work individually or in small groups, as well as after-school private music lessons.
- Storage Spaces for the Choral and Instrumental Music library,

<sup>2</sup> Please note: The inclusion of this space is currently being discussed.

student instruments, school-owned instrument inventory, chair/ stands rack storage, percussion equipment, microphones/amps/ electronics.

- Music Office with workspace for Music teachers, collaborative space for department meetings/CPT/admin meetings, photocopier.
- Proper acoustical and lighting design for all spaces.
- Access to a Performance Technology Studio for smaller performances, after school productions, and a performance ready practice space.

# L. VISUAL ARTS

Norwood Public Schools has maintained a strong Visual Arts Program for many years. The program starts in grade one and continues as a required course through grade eight. The Art teachers use whole class, small groups and individual teaching methods throughout their units of study. Technology is used in every class for demonstrations, visual research, as well as for displaying examples. The curriculum is taught through hands-on art making, using a wide variety of media and techniques. Students use water-based materials as well as sculptural elements, such as clay.

The Art program has the following space requirements for the new Middle School:

- Multiple sinks with hand washing areas,
- Multiple power outlets around the room and in a drop-down format, teacher workstations (for tools that require separation from students for safety purposes, such as paper cutters for example),
- Outdoor access would be optimal, to allow for environmental art as well as opportunities to use the landscape for potential projects,
- Furniture that is flexible by design with art in mind, including high top tables, stools for students, tables that can tilt and recline for drawing,
- Room for a variety of art-specific equipment like light tables and color printers,
- Design of the Art Rooms should have a studio quality, to emphasize the many career areas that incorporate the visual arts,
- Both the Art Rooms and the School should have multiple display areas for student work. The classroom would benefit from shelves or cases to showcase student models and exemplars. Additional spaces in the school should contain cases and bulletin boards to display student's artwork (both 2D and 3D work). Preferably in areas with high student traffic.
- The Art Program should have access to the higher capacity computers to support digital arts applications. These machines would be located in a centralized computer lab, which would be part of the Media Center.

Storage for the Art Program needs to be carefully considered, as the art

materials used are essential to students' learning. A well-designed and organized Art Room allows for enhanced learning capabilities, because students and teachers will have easy access to the necessary materials, facilitating independence in the older students. To create the safest space possible, Art instruction requires specific storage needs. There should be designated storage rooms to meet three purposes:

# Clay and Kiln Room

- A room to low fire white clay, with appropriate space for a kiln or multiple kilns. Multiple kilns would be ideal, considering there are two teachers and a large number of students in each semester and the sculpture elective. This material requires proper ventilation, as well as air purifiers in each room, to clean the silica particles. This room and area are a specific safety concern.
- Space for drying the clay (Drying is when most of the particles are released).

# **Classroom Storage**

- The importance of classroom storages lies in students being independent, hands-on learners. Storing student work and supplies properly creates a more conducive learning experience.
- Flat storage is needed to store students' two-dimensional work. Each student has a portfolio that is approximately 12" x 18" with each teacher teaching. There are approximately 10 sections per semester in the current model, with about 24 students per class. (About 240 per teacher per semester). Teachers need easy access to student work for the class to run smoothly.
- There is a need for storage for art supplies and materials for the current assignment (including paper). Students should be able access what they need in order to build independence.
- In-progress 3D work requires visible, accessible storage (separate storage for drying clay and kiln). For students to see each other's work while it is in process has two positive benefits: they can learn from each other not only in their section, but other sections as well, and they can see the process unfolding.
- Two taller drying racks with wheels (art can be stored on both sides) are needed for each room. The drying racks facilitate painting and printmaking lessons. The dry racks give the students the opportunity to properly story their work as well as independently care for their work.

# Storage Closet

- For easy access to the materials, the Art storage needs to be attached to the Art Rooms. This access provides teachers the opportunity to access the necessary material for learning. There are times when a student has a strong idea, but needs an unexpected material.
- Appropriate storage of materials is essential to the longevity of

use. In particular, heavy-duty metal or fixed shelving that fits paper that is  $18 \times 24$ ,  $12 \times 18$  and  $9 \times 12$ . The most storage is needed for  $12 \times 18$  paper. Paint and paper are heavy and require heavy duty shelving.

- Storage for large paper rolls (kraft paper, color rolls) for students to use in large scale assignments, as well for teachers' needs.
- Storages for paper, tracing paper, transparency, scratch art, printmaking (ink, gouges, linoleum, bench hooks, foam), ceramic materials: clay, glaze, tools, containers (watercups, mixing buckets, glaze containers, etc), sculptural material (plaster, wire, metal tooling, papier-mache, etc), other general art supplies.

The addition of grade five would require an additional Art teacher. The Art Department would utilize the STEAM Lab as a shared space, providing some flexibility in scheduling. Grade five students would follow the grade five Art standards and pacing chart, adding ageappropriate skills and practices with the additional facilitates and materials available at the middle school level.

# M. WELLNESS

The current program for wellness at Coakley Middle School includes both physical activity and grade-appropriate health curriculum, taught for one semester in grades 6 and 7 and for a full year in grade 8. Classes occur three days out of the six-day cycle. Physical Education Classes combine whole class and small group activities, simulation and active teaching, and cooperative learning, based upon the Physical Literacy; MA State Frameworks. The Coakley Wellness staff has also been trained in Project Adventure curriculum and has started to implement the program in grade eight. Project adventure uses cooperative games and team building initiatives to help learners become leaders and develop students to communicate and work together to problem solve and be successful. Students have the opportunity to try different activities which involve challenging themselves to stretch and grow while thinking outside the box. Health classes combine a mixture of lecture and direct instruction with whole class and small groups student-directed learning around a variety of topics, including several sensitive, but appropriate topics for adolescents in the middle grades. The classes frequently use peer/cooperative learning and project-based learning, and technology is used regularly to supplement classroom instruction, based upon the Health Literacy; MA State Frameworks

For the proposed Coakley Middle School building, several areas of the facility design are at the forefront of curriculum development and instruction in the Wellness Department:

• A designated Health classroom is critical. This will provide students with a "home base" for their health classes. Specific materials and supplies for the Health curriculum would be easily accessible for teachers and students, and students would be able to leave their classwork and projects in the classroom.

- A gymnasium with ample size (at least three teaching stations, separated by drop down curtains/dividers)<sup>3</sup> to accommodate large groups of students is essential, and supplements the games and activities in the Physical Education curriculum. The gymnasium should have one full-court and one half-court basketball courts with 6 basketball hoops. A climbing wall and other indoor Project Adventure elements (cargo net, hanging ropes) would also greatly enhance the team-building goals and objectives of the Wellness Department. Three teaching stations in the gymnasium will be critical in the 5-8 model for providing Wellness instruction as well as for community usage. As noted in the Community Usage section of this document, the current gymnasium at Coakley Middle School is a well-used, valued community asset that many community groups rely upon. Further detail is provided in that section.
- Additionally, a true Fitness Center equipped with age-appropriate cardio and strength training equipment should be considered a "must have" in the design of the new building. This fitness center would also serve as an appropriate space for adaptive PE and OT/PT services for Special Education services.
- Adequate storage space (minimum of two indoor closets and outdoor storage containers) is of high priority. Adequate electrical outlets and a quality sound system in the Gym are two design elements that must also be addressed.

Staffing needs for Health and Wellness would be 4 teachers for the 5-8 model. There would be no additional program needs for the addition of grade five students.

The following tables illustrate the proposed utilization for Wellness:

Period/ Day	A	В	С	D	E	F
1	6b Health	6f Health	6c Health	6g Health	5d Health	5h Health
2	5i Health	6f Health	6c Health	5e Health	6a Health	5a Health
3	7b Health	7f Health	7c Health	7g Health	5f Health	5j Health
4	5k Health	7f Health	7c Health	5b Health	7a Health	5g Health
5	8b Health	8f Health	8c Health	8g Health	8a Health	8e Health
6	8b Health	8f Health	8c Health	5c Health	8a Health	8e Health

#### Health Room Utilization Table

270 students/ 25 student = 11 sections per grade level

Please note that this may not be accurately depicted in terms of grade levels accessing the gym at the same time. There would be more consolidation of 5 and 6 and 7 and 8. The overall number of sections would remain the same.

<sup>&</sup>lt;sup>3</sup> Please note: The inclusion of this space is contingent on MSBA's willingness to reimburse for it.

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Period/ Day	Α	В	С	D	Е	F
1	6a Gym	6e Gym	6a Gym	6e Gym	6a Health	6e Health
	6c Gym	6g Gym	6b Gym	6f Gym	6b Gym	6f Gym
	5d Gym	5h Gym	5d Gym	5h Gym	6c Gym	6g Gym
2	6a Gym	6e Gym	6a Gym	6e Gym	6b Gym	6e Health
	6b Health	5a Gym	6b Gym	6f Gym	6c Gym	6f Gym
	6c Gym	5e Gym	5i Gym	5a Gym	5i Gym	5e Gym
3	7a Gym	7e Gym	7a Gym	7e Gym	7a Health	7e Health
	7c Gym	7g Gym	7b Gym	7f Gym	7b Gym	7f Gym
	5f Gym	5j Gym	5f Gym	5j Gym	7c Gym	7g Gym
4	7a Gym	7e Gym	7a Gym	7e Gym	7b Gym	7e Health
	7b Health	5b Gym	7b Gym	7f Gym	7c Gym	7f Gym
	7c Gym	5g Gym	5k Gym	5g Gym	5k Gym	5b Gym
5	8a Gym	8e Gym	8a Gym	8e Gym	8b Gym	8f Gym
	8c Gym	8g Gym	8b Gym	8f Gym	8c Gym	8g Gym
6	8a Gym	8e Gym	8a Gym	8e Gym	8b Gym	8f Gym
	8c Gym	5c Gym	8b Gym	8f Gym	8c Gym	5c Gym

Gym (3 Teaching Stations) Utilization Table

#### Adaptive P.E./Fitness Center

A well equipped fitness center is essential to meet the needs of the Coakley's diverse student population. Norwood prides itself on its effort to retain the maximum number of students possible within the district, minimizing out of district placements. Part of these school based programs include occupational and physical therapy and adaptive PE. A fitness center would provide the appropriate space to meet the needs of students within our various substantially separate programs. Additionally, the fitness center would allow for greater inclusion and participation during general education wellness classes. Middle School is a challenging time for many students and playing games with peers can create anxiety which leads to low or no participation in physical activities. A fitness room that is directly adjacent to the gym would allow the wellness teachers to have individuals or small groups getting exercise in a smaller space during wellness classes.

Period/Day	Monday	Tuesday	Wednesday	Thursday	Friday
1	7th gym	7th gym	7th gym	7th gym	7th gym
	access	access	access	access	access
2	PACS	7th gym	PACS (OT/	7th gym	7th gym
	(OT/PT)	access	PT)	access	access
3	8th gym	PLC (OT/	8th gym	PLC (OT/	8th gym
	access	PT)	access	PT)	access
4	8th gym access	8th gym access	LEAP (OT/ PT)	8th gym access	LEAP (OT/ PT)
5	6th gym	6th gym	6th gym	6th gym	6th gym
	access	access	access	access	access
6	6th gym	6th gym	6th gym	6th gym	6th gym
	access	access	access	access	access
Mustang Block	TASC	TASC	Bridges	TASC	Bridges

Adaptive P.E./Fitness Center Average Weekly Usage by Program

All open blocks would be available for use by Wellness Classes.

#### N. SPECIAL EDUCATION

#### **Review of the Special Education Rubric and Regulations**

Since the previous state review of Norwood did not include facilities, the NPS Special Education Department reviewed the rubric for the purposes of this plan. Looking at the four standards for ensuring accessibility, it was found that none of the four standards is being met in full. Currently, there is no designated classroom space for inclusion services and substantially separate programs are located in corners of the building. They are close to areas of sixth grade and World Language classrooms but are not team- or grade-aligned. All eligible students do have limited access to all school facilities, but they are greatly constrained by the Unified Arts schedules. Learning Centers and Special Education classrooms are not given priority for instructional space, due to the complete lack of space for most general education classrooms. Priority is given to the four core subjects, and many related service specialists do not have designated classroom spaces. While the Norwood Public Schools provide all necessary equipment for individual student needs, the District is unable to provide non-individualized audio or lighting treatments and must rely on individual FM systems and cloth coverings. For the standard of ensuring equity, the Coakley also fails to meet the requirement of Special Education spaces being equal, in physical respects, to general education classrooms. Most general education classrooms meet basic subject-specific designs; all Science classes are in Science Rooms; STEM Rooms have appropriate equipment. The Coakley PACS Program room is a prime example of how a space was reallocated without transitioning the space to the appropriate use. The PACS room used to be a home economics space, complete with several

kitchen stations. Some of the stations were removed, and some left for use by the program, however, the room was not able to be redesigned to best fit the needs of the program. The current building does meet the standard for minimizing stigmatization by not isolating Special Education spaces in one place, and by only serving middle school aged children in the programs at Coakley Middle School.

The proposed Coakley Middle School would allow for true integration of Special Education services. All inclusion academic support classrooms would be a part of their team pod, appearing as any other classroom in the neighborhood. There would be no signage designating that room for any type of specialized instruction. Coakley would have grade 5-6 program rooms and grade 7-8 program rooms, to better support the students and allow for greater integration among the overall school design. Physical inclusion is equally important to inclusion within the classroom. Placement of all Special Education spaces would follow the design of peer and grade integration. Additional related service spaces would also be integrated throughout the building.

#### Inclusion

The majority of students that receive Special Education services receive them in the inclusion setting. Each grade level has an inclusion program, and they are spread across all nine teams for maximum integration. Coteaching in Math and ELA are the foundation of the inclusion program, allowing students that require intensive support to receive that support in the general education setting from both the content teacher and special educator. Most inclusion students also have a scheduled academic support class that provides assistance in organization, test preparation, skill building and other needs that may be outlined on a students Individual Education Program (IEP).

Design needs for the inclusion special education program would be:

- A smaller classroom embedded within each team for grade level academic support,
- Private testing spaces, with a window for viewing into the room for supervision, allowing students to focus on testing,
- Office space for itinerant staff members.

#### Programs

Coakley Middle School houses five substantially separate programs. The depth of these programs allows us to retain the majority of all Special Education students within their home school and district, providing them access to their peers and educating them within their community. All of our programs are designed for maximum inclusion, which provides a meaningful educational experience for all of our middle school students. The Practical Application of Curriculum and Skills (PACS) program provides a highly individualized and modified curriculum for students with Autism spectrum disorders and/or other related disabilities that present with similar, and often severe, challenges. The Pragmatic Learning Center (PLC) is developed to meet the broad needs of students with Autism spectrum disorders (ASD) including academic, behavioral, language, sensory/motor, and social pragmatic needs. The TASC program is a district-wide academic and therapeutic program, addressing the emotional, behavioral and learning needs of students who are behaviorally or emotionally dysregulated and have significant difficulty accessing the general education classroom consistently. The Bridges program at Coakley Middle School provides support to students in grades 6-8 whose social and/or emotional concerns cause them to have significant difficulties succeeding in a general education classroom. The BRYT grant allows this program to also include students that have recently returned from a hospitalization. Students participating in the BRYT program typically are there for short term placements and often transition to the general education environment within 6-8 weeks.

# Current Special Education Program Offerings

Program	Rooms	Program Description (Current)
PACS	1	The Practical Application of Curriculum and Skills (PACS) program provides a highly individualized and modified curriculum for students with Autism spectrum disorders and/or other related disabilities that present with similar challenges. Inclusive opportunities, through reverse inclusion and purposeful participation within general education environments allow students to be a part of the school community. Instruction is provided in small group and/or individual settings and focuses on skill development in academics, social pragmatics, daily living skills, and health/wellness. Each student's program is individually tailored to learning opportunities, based on identified skills development and based on the principles of Applied Behavioral Analysis (ABA) across all domains. Depending on age level, community-based instructional opportunities may be available for generalization of skills such as socialization, community awareness and exposure, functional mobility and safety skills. This program would require a full sized classroom with space for kitchen and laundry equipment to facilitate life skills education. While the number of students in this program can fluctuate greatly (10 year average enrollment is 8 students) the staff to teacher ratio is also high as many of the students have a 1:1 aide as part of their Individualized Education Plan (IEP). This program would also require a self contained toilet as many of the students in the program require assistance with toileting.
PLC	1	The Pragmatic Learning Center (PLC) is developed to meet the broad needs of students with Autism spectrum disorders (ASD), including academic, behavioral, language, sensory/motor, and social pragmatic needs. The program is designed to address the individual needs of each student, affording small group instruction and inclusion opportunities. Ongoing collection of data and review of student progress drive modifications in teaching procedures. Direct instruction is available in the following areas: literacy w/strong focus on comprehension, written language, mathematics, communication and social skills. Additionally access to assistive technology, behavior support and anxiety management/support is available throughout the students day. Each student has a general education classroom as a homeroom and is included, as appropriate, throughout the school day. This program would require a full sized classroom space since the student population in this program ranges from 12-18 and staffing includes 2-3 paraprofessionals.
TASC	1	The Therapeutic Academic Support Classroom (TASC) is a district-wide academic and therapeutic program addressing the emotional, behavioral and learning needs of students who have difficulty with social problem solving, inadequate conflict resolution skills, ongoing inability to maintain safety with self/others, and/or are behaviorally or emotionally dysregulated and have significant difficulty accessing the general education classroom consistently. Significant emphasis is placed on individual programming, which identifies and teaches coping strategies and is designed to teach and reinforce social and emotional strategies. All students are connected with the general education curriculum and classroom environment with built-in opportunities for social engagement and learning, accompanied by staff support and facilitation. The core of this program is supporting student emotional health in order to increase their availability for learning. This program requires a calming space for dysregulated students that is easily accessible from the program but able to provide a more private space for a student to engage in calming techniques.

Program	Rooms	Program Description (Current)
BRYT / Bridges	1	The Bridges program at Coakley Middle School provides support to students in grades 6-8 whose social and/or emotional concerns cause them to have significant difficulties succeeding in a general education classroom. Depending on the individual student, their needs can be met in a Special Education classroom, general education classroom or a combination of both. The level of support provided within the program is flexible to allow the students to access support when needed, but also work to attain skills independently.
		Coakley Middle BRYT Program provides support to students who are transitioning back to a full schedule after participating in intensive mental health treatment or who were unable to attend school due to a serious mental health challenge. The BRYT program provides clinical support, academic coordination, family support, and care coordination services.
		This program requires a calming space for dysregulated students that is easily accessible from the program but able to provide a more private space for a student to engage in calming techniques.
LBLD	1	The Language Based Learning Disability (LBLD) program exists for students who have substantial difficulty with language-based concepts, including but not limited to, decoding, fluency, reading comprehension, writing and sound-symbol relationships. Classrooms are centered around direct systematic multi-sensory approach and focus on executive functioning skills such as planning, flexibility, tolerance, methods, social and problem-solving skills. This is a highly structured language-based program that implements specially designed instruction, which is individualized according to the specific goals and benchmarks of the student's IEP. In addition, all academic instruction is aligned with the State Curriculum Frameworks and a Speech/Language Pathologist is assigned to the classroom to collaborate with teachers and service providers to develop the best strategies for a successful program.
LEAP (adding in 2021- 2022)	1	The Learners Exploratory Academics Program (LEAP) is a program designed to service students with global disabilities inclusive of intellectual impairment. The program provides individually designed instruction, accompanied by specialized therapies in a substantially separate setting. LEAP supports inclusion at appropriate times for individual student success, while providing opportunities for more specialized instruction focused on the development of functional academics, life skills and social pragmatics. Often students participate in co-treatments, integrating skills across domains. While the number of students in this program can fluctuate greatly (10 year projected average enrollment is 4 students) the staff-to-teacher ratio is also high as many of the students have a 1:1 aide as part of their Individualized Education Plan (IEP). This program would also require a self-contained toilet as many of the students in the program require assistance with toileting.
Grade 6 Inclusion	0 for Academic Strategies (A/S)	Inclusion at Coakley Middle School involves fully including students in general education to the greatest extent possible. Curriculum is accommodated and modified to meet the specific needs of individual students as outlined in their IEPs. In-class support is given by Special Education teachers or instructional aides. Inclusion services are delivered using a variety of teaching methods, with the goal of using the co-taught model as frequently as possible.
Grade 7 Inclusion	1 for A/S	
Grade 8 inclusion	0 for A/S	

#### Proposed Design Needs for Special Education

With the exception of the addition of the LEAP program for the 2021-2022 school year, there are no proposed programmatic changes for the substantially separate programs at CMS. No programs will be eliminated and no additional programs will be brought back into the District.

The tables below outline the space needs associated with the Special Education programs currently offered, as well as the anticipated utilization for these spaces.

Program	Current Space	Proposed Space Needs 5-8 model	Proposed Space Needs 6-8 model
PACS	1	3	2
PLC	1	2	1
TASC	1	2	1
BRYT/Bridges	1	1	1
LBLD	1	2	1
LEAP	0	2	1

Special Education Space Needs

# Special Education Program Space Daily Utilization Chart

PACS (5th room, 6-7, 8th room)	LEAP (5% room, 7⁄8 room)	TASC (5% room, 7⁄8 room)	Bridges / BRYT	LBLD (5% room, 7⁄8 room)	PLC (% room, % room)
MM	MM	Drop In	Drop In		MM
5 ELA	5 ELA	Drop in	Drop in	Reading 5th	5 ELA
5 SS	6 ELA	Drop in	Drop in	Reading 6th	6 ELA
5 Math	5 Math	5th Academic Support	8th Academic Support	5th Academic Support	5th Academic Support
5 SCI	6th Academic Support	Drop in	Drop in		6 Math
5 Academic Support	6 Math	6th Academic Support	6th Academic Support	6th Academic Support	6th Academic Support
Open	5th Academic Support	Drop in	7th Academic Support		6 Math
Life Skills	Life Skills	Counseling	Counseling		Social Skills
5th - 4 6th - 5 7th - 4	5th - 3 6th - 3 7th - 2	5th - 4 6th - 4 7th - 3	5th - 6th - 7th -	5th - 6th - 7th -	5th - 6 6th - 5 7th - 5 8th - 3
	room, 6-7, 8th room) MM 5 ELA 5 SS 5 Math 5 SCI 5 Academic Support Open Life Skills 5 th - 4 6th - 5	room, 6-7, 8th room)(5% room, 7% room)MMMM5 ELA5 ELA5 SS6 ELA5 Math5 Math5 SCI6th Academic Support5 Academic Support6 Math0pen5th Academic SupportLife SkillsLife Skills5 th - 4 6th - 5 7th - 45th - 3	room, 6-7, 8th room)(% room, 7% room)(% room, 7% room)MMMMDrop In5 ELA5 ELADrop in5 SS6 ELADrop in5 Math5 Math5th Academic Support5 SCI6th Academic SupportDrop in5 Academic Support6 Math6th Academic Support5 Math5th Academic SupportDrop in5 Academic Support6 Math6th Academic Support5 th Academic SupportDrop in5 th Academic SupportDrop in6 th Academic SupportDrop in14 Sth - 35th - 46 th - 56 th - 37 th - 47 th - 2	room, 6-7, 8th room){5% room, 7% room)(5% room, 7% room)BRYTMMMMDrop InDrop In5 ELA5 ELADrop inDrop in5 SS6 ELADrop inDrop in5 Math5 Math5th Academic Support8th Academic Support5 SCI6th Academic SupportDrop in5 Academic Support6 Math6th Academic Support5 Academic Support6 Math6th Academic Support5 th Academic SupportDrop in5 th Academic Support7th Academic Support5 th Academic SupportDrop in5 th Academic Support0 for pin5 th - 4 6 th - 35 th - 46 th - 5 7 th - 46 th - 36 th - 4 7 th - 27 th - 3	room, 6-7, 8th room)(% room, 7% room)(% room, 7% room)BRYT(% room, 7% room)MMMMDrop InDrop In5 ELA5 ELADrop inDrop inReading 5th5 SS6 ELADrop inDrop inReading 6th5 Math5 Math5th Academic SupportSth Academic SupportSth Academic Support5 SCI6th Academic SupportDrop inDrop in5 Academic Support6 Math6th Academic Support6th Academic Support5 Academic SupportDrop inDrop in5 th Academic SupportDrop inBrop in5 Academic SupportDrop inDrop in5 th Academic SupportCounseling6th Academic Support5 th Academic SupportDrop in7th Academic Support5 th Academic SupportDrop in7th Academic Support5 th Academic SupportDrop in7th Academic Support5 th Academic SupportDrop in7th Academic Support5 th - 4 6th - 35th - 4 6th - 35th - 4 6th - 7 7th - 7th - 7th -

Additional Spaces Needed:

- Department Head Office
- Team Chair Office
- Conference Room for meetings (in addition to guidance and main office conference rooms)
- OT office/teaching space
- Speech and Language office/teaching space
- School Adjustment Counselor Offices 3
- Room with suspension equipment (ability to hang suspension equipment)- could be part of the Fitness Center described in the Wellness program design.

Professional office and testing spaces will be designated for related service providers in the areas of:

- Speech and Language Pathologists,
- Occupational Therapists,
- Physical Therapists,
- Behavior Specialists,
- Vision and Hearing Specialists,
- Reading Specialists,
- Adaptive Physical Education,
- School Adjustment Counselors,
- School Psychologist, etc.
- Team Chairperson.

The new middle school will include many smaller meeting rooms for individual and small group tutorials, outside therapists, and specialists. These rooms may be used for regular teacher/tutor meetings and for small group testing environments and will be fully immersed within the academic neighborhoods.

# **O. LITERACY AND LANGUAGE**

The Literacy and Language Program at Coakley Middle School provides comprehensive General Education Reading Intervention and English Language Development Instruction.

# Literacy

Students are placed in general education reading classes based on a variety of factors including, standardized test scores, normreferenced, research-based reading assessments and core teacher recommendations. Instruction is targeted and designed to meet the needs of the individual students in the classroom. Students are grouped homogeneously according to target skills. Reading instruction encompasses skills and strategies in reading comprehension, critical thinking, synthesis, writing about reading, fluency, vocabulary, Greek and Latin roots, word structure, phonics, phonemic awareness, and spelling. Curriculum is teacher-developed and targets the Literacy Standards of the Massachusetts Curriculum Frameworks.

#### English Language Development

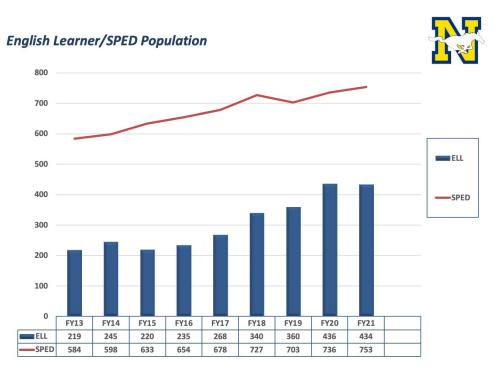
English Language Learners (ELL) Teachers identify possible English Language Learners based on home language surveys. The WIDA Screener is given to students who speak and understand a language or languages other than English. Qualified students receive comprehensive English language development instruction in all language domains: listening, speaking, reading, and writing. Students at all levels of English proficiency receive instruction that is rooted in researched based methods and uses a variety of resources. Students are given many and varied opportunities to hear, speak, read, and write English.

The goal for all students in our EL Program is for all students to be scheduled in a manner that will allow them to progress with their peers and eventually test out of the English Learner Program.

At the high school level, students have to earn a Proficient rating on ELA MCAS in order to earn the Seal of Biliteracy. We choose their programming to support their English instruction in order for them to earn that proficient rating.

EL students have the option to test for the Seal in their home language as early as 9th grade. They have 4 years to repeat the test to demonstrate an Intermediate High or higher rating in the 4 tested domains for the Seal. Students have the opportunity to demonstrate their proficiency through a portfolio if their home language is not a tested language.

The State Seal of Biliteracy is an award provided by state approved districts that recognizes high school graduates who attain high functional and academic levels of proficiency in English and a world language in recognition of having studied and attained proficiency in two or more languages by high school graduation. Our vision is to help students recognize the value of their academic success and see the tangible benefits of being bilingual. There will be no major programmatic changes to the English Language and Literacy programs. However, there has been a steady increase in the number of English Language learning students in the Norwood Public School, so increasing our capacity to serve those students is essential. The graph below shows the projected increase in the Norwood English Learning Population:



Additionally, the table below illustrates the utilization of ELL spaces: *English Language Learners Space Daily Utilization Chart* 

Block/ Room	Room 1	Room 2	Room 3
B1	EL Level 1 ELA	EL Level 1 SS	Literacy 6
B2	EL Level 1 ELA	EL Level 1 SS	Literacy 6
B3	EL Level 2 ELA	EL Level 2 SS	Literacy 7
B4	EL Level 2 ELA	EL Level 2 SS	Literacy 7
В5	El Support Level 3/4	El Support Level 3/4	Literacy 8
B6	El Support Level 3/4	El Support Level 3/4	Literacy 8
B7	RTI ELA 6	RTI ELA 7	RTI EL 8

Design changes needed in a new Coakley Middle School to support and enhance this programming include:

- Adjustable lighting,
- Flexible seating to allow for individualized learning and collaboration,
- Technology and space for small groups, 1:1 and station work,
- Easy access to whiteboards in a variety of areas to support instruction,
- Access to a Performance Technology Studio space to allow for

presentations, as well as provide opportunities for spoken language in a dramatic and engaging manner for our English Language Learners.

Aligns with Strategic Plan Objective 4 -Create pathways that enable students to explore and pursue their interests and passions, while contributing to the overall good of the community.

# P. MEDIA, STEM AND TECHNOLOGY EDUCATION

#### Library Media Center

The proposed Library Media Center would represent the center of the school. The staff at CMS envision this place as much more than a traditional library with books. The need for physical books has been greatly reduced through increased technology but the need for a space for both online and book-based research remains. The proposed space includes two main components: a large central area for browsing and gathering and a smaller collaboration space equipped with a dedicated computer lab with enough processing power and memory to run specialized programs needed for STEM, technology, and art classes.

A large central area in the school is beneficial for students, staff, and the community. Not only will it be in a central place that students will want to enter to browse for books, but it can also be a place for small groups of students to study, and for the school to hold afterschool programming such as SEARCH and National History Club meetings. This could also be a location for larger staff meetings that allow for teachers to work and collaborate versus sit and listen as would occur in a more auditorium style setting. Currently, the Library at CMS is used for PTO, speakers, and other school and community events. Having a dynamic space that is available for the community would be an added benefit.

This shared space could be used throughout the school day without disrupting the flow of the Library. As CMS builds and expands programming in areas of computers and STEM, the need for higher capacity computers is essential. Programs such as CAD and other 3-D modeling programs need these higher capacity machines. Having this located in the Media Center allows for all grade levels to have access to the technology.

# Project Lead the Way

In 2019, the Coakley Middle School began a partnership with Project Lead the Way (PLTW) to infuse the curriculum with "in demand, transportable skills-such as problem solving, critical and creative thinking, collaboration and communication- that [students] will use both in school and for the rest of their lives." PLTW courses are embedded in three areas of the middle school curriculum: grade 7 Science (Medical Detectives), grade 7 Technology (Computer Science for Innovators and Makers), and in Grade 8 STEM (Design and Modeling).

# **STEM**

The STEM Department primarily uses current informational texts and videos in digital format that connects with the Massachusetts technology/engineering and Next Generation Science Standards (NGSS) for grades 6-8. Nearly all of the STEM curriculum has been created by Coakley Middle School teachers to incorporate content standards and NGSS practices into hands-on design challenges that require students to utilize the engineering design process while learning content, developing engineering practices/ skills and connecting to real world scenarios. In 2020-2021, STEM students began to use the Project Lead the Way (PLTW) curriculum: Design and Modeling. Starting in 2021-2022, the PLTW curriculum will make up 100% of the grade 6 STEM curriculum, while grades 7 and 8 will continue utilizing design challenges embedded with content and engineering practices. The PLTW curriculum also includes the design challenge format that Coakley Middle School teachers implement to teach both content and engineering practices while connecting to real world problems. Students work in the following ways in STEM:

- Collaboratively, both in pairs and in small groups through the use of hands-on activities,
- Teacher-led demonstrations and design challenges/problem solving activities.

Students also use the Google platform to document their process throughout design challenges, as well as TinkercAD for 3-D design, drawing and printing. Grade 8 students have the opportunity to 3-D design and print materials for use in their design challenges. Currently, the STEM program has limited opportunities to incorporate the artistic side of the design process, due to a lack of space and equipment. One programmatic change that would be facilitated by a new building would be the collaboration between STEM and Art to create an authentic STEAM program.

Current STEM Lab Tools/Machines:

- Band saw
- Drill press,
- Various hand tools,
- Clamps,
- Safety features/gear,
- Wind tunnel,
- Maglev testing station,
- 2 Makerbot 3-D printers,
- 2 -XYZ 3-D printers,
- Kelvin Bridge Crusher,

In order to fully implement the PLTW Design and Modeling curriculum and the grade 7 & 8 STEM programs, the proposed Coakley Middle School building requires each of the two STEM lab to contain a "clean" lab space and a "dirty" lab space with ample storage for both materials and student projects within the space. There would be movable lab tables with flexible and moveable seating options. Ideally, this would be a single space with a moveable divider for ease of transition and flow of the class, which frequently moves at an individualized pace. For example, some students may need to be in the clean space, completing their design, while others have moved on to construction or testing.

The clean lab space will primarily be used for 3-D design/printing, research, brainstorming and some testing/evaluating. This would consist of a classroom set of desktops/laptops, 3-D printers, laser printer(s) and machines such as the wind tunnel and magnetic levitation track that work with software programs and digital devices that require a laptop or desktop. Ample student seating and desk/table space will be required, along with multiple electrical outlets.

The addition of student collaboration spaces would augment the ability for STEM and Art staff to collaborate and create cross-curricular projects. This space would allow for students to create, design and build models in STEAM and use digital and hands-on materials to create professional-style models. This would create a career-based program model that connects learning in schools to careers in the workplace.

The dirty lab space will primarily be used to construct and test/evaluate student designs. All machines (drill presses, band saws, etc.) and tools will be housed in this space for student use and for storage. This space will require appropriate safety equipment and emergency electrical shut-offs as well as ample access to electrical outlets and water (utility sink.) Ideally, storage for student projects and for all materials will be housed within this space. Work tables/benches (standing height) will be required along with work stools (minimal stools will be required - as most work will be done standing). There should be 6-10 drop down electrical outlets available throughout the space.

The addition of grade five would potentially require an additional STEM lab to accommodate all sections of the program.

# **Technology Education**

To align with the Digital Literacy and Computer Science Standards significant changes were made to the Coakley Middle School computer curriculum during the 2019-2020 school year. Grade 6 students focus on Google applications, such as Sheets, Docs, and Slides, as well as digital citizenship, Internet safety, basic coding, and 3-D design. Students demonstrate their knowledge through various projects incorporating a variety of technology skills. Grade 7 students are involved with more detailed programming, and follow the Project Lead the Way curriculum, which explores using technology as a solution in real world applications. Although the school is 1-to-1 with Chromebooks for each student, many of the applications utilized in the technology education curriculum are not supported by Chromebook and require more robust machines to operate them. A computer lab with 30 computers, a teacher desk and projector has been and continues to be utilized for computer classes

and instruction. Students move into another classroom to use tools to build prototypes to demonstrate their learning.

This is a growing program that currently only requires one space and one staff member. To adequately serve all students two classroom spaces would be required.

# **Q. TRANSPORTATION POLICY**

Norwood Public School students in grades 5-6 who live more than 2 miles from school are provided bus transportation to their school at no cost. Students who live within the 2 miles pay a fee for bus transportation. The number of students needing bus transportation will be determined each summer and could add to some additional bus traffic at the school.

Presently there are 13 buses, five minibuses, and 25 passenger vans that transport approximately 1,600 regular and Special Education students daily for the Norwood Public Schools. At the present time 107 grade five students get transported daily by the Norwood Public Schools. Students are transported to their respective schools in three shifts, with middle school students picked up and dropped off first, high school students picked up and dropped off second, and elementary students transported to their schools last.

There is an expected increase in cost to moving grade five students to a new middle school because of the geographic location of the school. The Coakley Middle School is in the southern tier of Norwood, causing the need for more students to be bused. This may lead to the purchase of 4-5 additional buses.

Mitigation for any increased traffic by buses or cars will be provided at a new Coakley Middle School with improved roadways, clearer signage, improved lighting, and better sight lines for vehicles and pedestrians. There are currently separated bus and car drop off and pick up areas at CMS. To maintain safety and relieve congestion a new Coakley Middle School should also have separate bus and parent pick up areas.

New or existing walking paths, sidewalks, and crosswalks will be built or upgraded. They will be well lit, clearly marked, and will provide students, staff, and community members safe passage into and out of the building. All transportation and access improvements will be ADA compliant.

Strategically placed bike racks will provide more opportunities for students and staff to use an alternative method of travel to school.

Parking at the new school will be adequate to serve the needs of the school during the day and will also be sufficient to serve the Norwood community for town-wide events during out-of-school time. The Coakley also serves as the overnight parking location for all Norwood School buses

Additionally, the Town of Norwood and the Norwood Public Schools will ensure that the Coakley Middle School is designed to ensure:

- Safe access for bus traffic that does not interfere with drop off and pick up traffic
- Safe and controlled access for deliveries
- Recess and recreation areas that are protected from traffic

# R. FUNCTIONAL AND SPATIAL RELATIONSHIPS AND KEY ADJACENCIES

# Current

Organizationally, Coakley Middle School faces a number of challenges. Originally designed to support departmental school organization, the building does not fit the middle school team structure that Coakley (and most modern middle schools) currently employs. Team or "neighborhood" organization of middle schools creates smaller, more personalized learning environments, which foster interdepartmental collaboration and support social-emotional learning. These teams also help provide a sense of belonging for students, helping them to foster an identity that unites them with their peers and makes them feel supported and secure. The existing building is not designed to support this teaming structure, and does not provide the neighborhood-based support spaces that make this model truly successful.

Furthermore, as the Coakley Middle School evolves its pedagogy to meet 21st Century Learning criteria, the School has developed STEAM integration, as well as a robust teacher collaboration protocol, and is implementing more project-based, hands-on instruction. The current building layout provides no dedicated spaces for STEAMintegrated work, project-based work, teacher collaboration or student collaboration.

Building navigation and location of publicly accessible spaces are also problematic. A network of dark, circuitous internal corridors makes wayfinding in the existing Coakley Middle Schooldifficult. Spaces that are often the destination of outside visitors and parents – such as the gymnasium and medical suite – are located far from the main entrance and create a security issue when visitors need to access these locations. Navigation and layout deficiencies also impact student support services. These services often end up being housed in smaller spaces that are unsuitable, and end up being tucked away in whatever spaces can be carved out for them in an already crowded building.

It is not only the corridors that are dark: The original building was constructed in 1972, at a time when it was considered acceptable to design classrooms without direct access to natural light and ventilation. We now know that student performance is negatively impacted by the lack of fresh air and sunlight, yet many of the internal spaces in the existing building – classrooms, included – lack this access.

#### Proposed

The educational visioning sessions conducted with faculty, staff, administrators, and building committee members in December of 2020 and January of 2021 provided much insight into the aspects of the proposed educational environment and its ability to support the desired educational program. Many of those concepts are captured in the above-defined requirements for specific program areas. However, there are also overall functional, spatial, and adjacency requirements not mentioned above that are documented below.

The overall functional and spatial layout of the building is built upon the following key concepts:

- Creation of team "neighborhoods" to provide smaller learning environments that will better support personalized learning as well as social, emotional and academic student support.
- Creation of a variety of flexible, adaptable learning spaces within the team neighborhoods that can be utilized to support teacher collaboration, student collaboration, and hands-on, project-based learning.
- Creation of a "main street" or spine that will provide a central hub around which to organize student support services and community spaces and will clearly delineate between community-accessible and non-public space.
- Emphasis on biophilic design concepts will maximize access to natural light and ventilation and create ample opportunities to access outdoor learning spaces.

# Team Neighborhoods

With the research showing an overwhelming benefit to having more personalized learning environments for students – particularly in the middle school years, the strategy many districts find themselves employing is balancing the operational need to maintain "fewer and newer" buildings by consolidating populations into one location with the educational/social need to create smaller, more personal learning environments that can cater to individual students' needs.

The foundational organizational unit of Coakley Middle School is the Grade Level Team. While Coakley has employed a team structure for some time now, the physical layout of the current building does not support it. The proposed Middle School will provide each team with its own academic neighborhood. Each of these neighborhoods will serve as the "home base" for their team, providing a more personalized learning and social environment within the context of the larger school. Each neighborhood will consist of classrooms for the core academic subjects (ELA, Math, Science, and Social Studies), special education classroom, student collaboration space, and specialized program space. Each neighborhood will house a shared planning and work space for teachers that will allow for teacher collaboration on instruction, student follow-up and other interdisciplinary opportunities.

In the new 5-8 middle school, the proposed building will incorporate the team structure into an overall organizational hierarchy that will leverage the educational benefits of including 5th grade in the middle school.

The school will be organized into two groups – the Lower School for grades 5 and 6, and the Upper School for grades 7 and 8. This structure will capitalize on the social similarities between 5th/6th graders, and provide opportunity to introduce incoming 5th grade students to appropriate skills development, benefiting them personally, socially, and physically. Furthermore, the Upper/Lower school delineation will serve to guide facilities scheduling and programing, as well as developmentally-based social activity planning. The delineation between the Lower and Upper schools will further be emphasized through a physical separation, either through a vertical separation by assigning the different grades to different floors, or through a horizontal separation by assigning different grades to different wings.

While Administration will largely be centralized in one part of the building, both the Upper and Lower Schools will have spaces for administration, so that there is an administrative presence located in each internal school. This presence will provide each "small" school with administrative support.

# Creation of a Variety of Flexible Learning Spaces

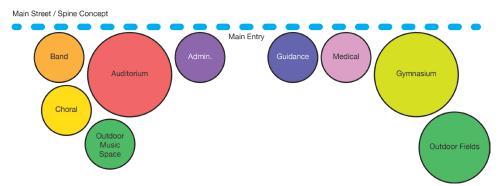
A key component of the team neighborhoods is the inclusion of a variety of spaces that support the pedagogical goals of the School. Maker spaces have been a popular design concept in recent years, but recently those spaces have been seen as being too generalized to effectively support curriculum. Content-specific project-based learning labs have become a new alternative to the makerspace, as the design of these spaces are driven by specific pedagogical needs. However, having spaces that are too specific can be limiting as well, particularly in a school that is focused on general education. For this reason, Coakley is looking for a mix of space types, including student collaboration spaces and project-based learning labs. While the learning labs will provide a dynamic space that allows for hands-on work in specific subject-matter and create an opportunity for students to become deeply engaged in that subject matter, the more generalized collaboration spaces will provide the space and resources needed for interdepartmental projects. One cogent example provided during visioning was the potential for collaboration between Visual Arts and the ELA department: ELA incorporates performance of plays or dramatic texts into instruction. A student collaboration space could provide a place where the two departments could work together to make sets for these performances.

The move towards a more project-based instructional style is dependent upon the provision of spaces that support collaborative group work both for students and teachers. The proposed Coakley Middle School will provide a variety of these types of spaces in a variety of locations throughout the School. Academic neighborhoods will be home to several breakout spaces - allowing for learning and collaboration to happen beyond the four walls of the classroom. These student collaboration space will provide opportunities for students to work in a quieter environment, or one-on-one with a teacher, as well as in groups. A larger academic commons will unify the building while creating a hub for activity, and provide additional opportunities for social-emotional learning, collaboration and interaction outside of the classroom. The use of transparency and adjacency to teachers and administration will ensure that these settings are open, welcoming, and well-supervised.

#### Creation of "Main Street"

During the visioning sessions, several uses were identified as needing to be centrally located within the school, and also located in a way to allow controlled visitor access. The concept of a main street or spine was developed. This linear layout would be located immediately adjacent to the main entry, which would be serviced by a security checkpoint and the main administrative offices, to provide visitor access control. Other programs that are frequently visited by parents and other outside visitors that would benefit from being in this location, as well, such as the medical suite. This main spine could also provide controlled access to larger spaces such as the Student Commons, Gymnasium and Auditorium, which would be beneficial so that these spaces could be used for community events without having to open up the entire school building.

This main spine would also provide a natural hub for students to come to, and would position student support services – such as guidance – in a highly visible and welcoming location as a means of reducing stigma often associated with seeking out this type of support.



**Connection to Outdoor Learning Spaces** 

The benefits of learning outdoors have been well documented: students perform better academically, have better health, decreased stress, and decreased behavioral issues, to name a few. Connecting curriculum and instruction to outdoor spaces enriches education by providing expanded opportunities to engage students in hands-on, real-world learning. In addition to taking advantage of on-site outdoor learning spaces, the current Coakley Middle School is situated directly adjacent to Endean Park- a town resource which offers a variety of other outdoor learning opportunities, including community gardens, orchards, a pond, and walking trails.

Team Neighborhoods should have direct access to outdoor learning spaces, which will provide additional project space, social space, classrooms, performance space, study areas, recreational space, and other support areas for the educational environment.

The ideal functional adjacency would prioritize direct connections from science classrooms, and project-based labs to the outdoors to incorporate the outdoor environment into the instruction and curriculum. Other outdoor learning connections to be incorporated include Visual Arts, Music and Wellness. Connecting the student commons to the outdoors will create additional opportunities for students to access the outdoors recreationally.

#### S. COMMUNITY USAGE

Coakley's facilities are the most utilized school site in the District and are used year-round by several Town and community organizations for residents of all ages. The Gymnasium and Auditorium in particular are indispensable community assets. In 2019, the Auditorium alone hosted 90 events outside of regular school hours. Of these, 59 events were held during times when the High School auditorium was unavailable because it was in use for other events. For the Coakley Gymnasium, usage is also very high. The current gym is 9,900 SF and allows for multiple activities to take place simultaneously. For the 2018-2019 fiscal year, there was a total of 225 events scheduled for evenings and weekends throughout the school year and over the coarse of the summer. For the 2019-2020 year that number was 354. During the summer, the gym is used every weekday from 8 am until 3 pm by the Town Recreation Department for summer camp. During the school year, the gymnasium is consistently scheduled for usage by a variety of organizations for the majority of the day on most Saturdays and Sundays, and multiple evenings a week from 3 pm to 9 pm. Often during the school year, multiple events are scheduled for overlapping times.

Town and community organizations that utilize the Coakley include:

- The Recreation Department/ Civic Center
- The Health Department/ Impact Norwood Coalition
- 4th of July Parade
- Norwood Little League
- Norwood Youth Soccer
- Norwood Youth Basketball
- Norwood Youth Hockey
- Special Town Meeting
- Teachers Driving Academy
- WCC Babysitting Course
- Challenger Basketball

Aligns with Strategic Plan Initiative 1.3 - Align School/Town resources to achieve strategic objectives and initiatives. Challenger Football

Additionally, the Fine Arts and Athletic Departments use the Coakley for many different community events (concerts, rehearsals, practices, games, meets, etc.) for grades elementary through high school.

The various youth leagues identified in the list above rely heavily on the Gym and outdoor space at the Coakley. Without being able to utilize a Gym the size Coakley currently has, and the number of fields currently offered, the sports programming for youth in Norwood will be negatively impacted. Space is already a tough competition in Norwood, between the various Town and community organizations that are seeking safe places to provide programming to residents and students. If anything, more space for these programs is needed, not less.

The first two organizations on this list - the Recreation Department and the Health Department/ Impact Norwood - are especially strong partners and collaborators of Norwood Public Schools. They work with NPS to bring programming, resources, and opportunities to our students as well as to the broader community.

The Recreation Department works with Dr. Fraczek to offer after school programming for middle school students, half-day enrichment programs on early dismissal days, and intramural sport options. NPS currently does not have middle school interscholastic athletic programs, so this partnership is key in providing students opportunities and exposure to athletics. The Recreation Department also offers basketball clinics and volleyball clinics, bringing together the coaches at the High School with middle school students interested in those programs. Additionally, the Recreation Department runs Community Service groups targeting middle school students and requires space at Coakley after school to do this.

The Recreation Department uses the Coakley site for most of their summer camps and programs that run from the end of June until mid- August. Some summer programming occurs at the Balch and at Father Mac's playground/ pool; but overwhelmingly it is the Coakley site where Norwood youth enrolled in Recreation Center programming spend their summers. There are between 250-300 students weekly, grades K-8th grade, involved in these summer programs at the Coakley site. There is Junior Play (grades K-1), Playground Camp (grades 2-5), Senior Play (grades 6-8), and the Challenger program. The Challenger Program is a partnership with the Norwood Public Schools and the Norwood Recreation department. It is run by the Norwood Recreation Department, with the NPS providing staff for the summer camp and recommendations as to which students would be ideal candidates for the program. There are also "counselor in training" opportunities for young high school students who can't yet be full camp counselors. These programs utilize the outdoor space at the Coakley, as well as the Gym, Cafeteria, Art Room, and Auditorium. Without all these spaces, the offering of the Recreation Department to the town's youth would

be impacted. Superintendent of the Recreation Department, Travis Farley, has stated that if space is reduced indoor or outdoor at Coakley, it will have serious ramifications on the programming offered by the Recreation Department.

The Norwood After School Program does not currently conduct any programs at the middle school level. Recently, discussions have begun to create a grade six program at the Coakley. The afterschool program will need to be extended to the new building. The program would be able to use the existing spaces in the new building and any storage needs could be addressed through the additional storage that is part of the building proposal.

The Health Department/ Impact Norwood utilizes the Coakley School year-round as well to engage youth, educate the community, and hold programming for parent education. Presentations are held in the auditorium on several health, safety, and prevention-related topics. Impact Norwood is a prevention coalition and uses a community approach to promote a drug-free and healthy Norwood through education, awareness, prevention, and action. It's partnership with the District is critical to its mission; and education is one of the 12 sectors required to have as its members. Several administrators are part of Impact Norwood and the Education Sector is currently represented on the Steering Committee of Impact Norwood.

Impact Norwood has had a strong Youth Ambassador program at the High School for several years, and in the last two years has been actively recruiting middle school students to participate as well. Having a space at the Middle School to use for groups that are developmentally appropriate for students grades 6-8 is critical according to Aubrey Ciol, Director. She has identified the current space at Coakley has a barrier to achieving all the goals of the Coalition. Currently they utilize the auditorium and different classroom space. They rely on technology such as white board space and projectors for their weekly meetings with students. Goals of Impact Norwood include bringing in more selfcare and emotional regulation programming to the youth at Coakley (for example: yoga, fitness programming, meditation). Ideally having more breakout spaces with more flexible seating or a Wellness Center would help this program achieve its community-wide goals.

Impact Norwood also helps fund mental health support and programming for NPS students and staff. They partner with the District to apply for grants and help NPS bring in necessary support services. These presentations happen both during the school day, and in the evenings. Impact Norwood also partners with the district to implement the MetroWest Behavioral Health Survey to all students, grades 6-12. The District and Impact Norwood utilize that data to help guide the programming and resources that will be offered to students, staff, and the community.