2.1: INTRODUCTION

Overview

The Orange Elementary Schools (OES) in Orange, MA are set in a small rural town of approximately 8000 residents. The schools provide education to preschool through grade six students in two elementary schools; one school being, Fisher Hill Elementary School, a primary school servicing students in preschool through grade two and the other, the Dexter Park Innovation School which services students in grades three through grade six. The District is considering whether to build a new school that would house students in grades Pre K through 6 or to build a new school for grades three through six.

Teaching Philosophy and Methods

The Orange Elementary Schools philosophy and methods are guided by the District’s mission, vision, and core values. These are connected to the district’s Accelerated Improvement Plan (AIP) which focuses on students developing and understanding the purpose of their learning, acquiring essential skills and mindsets, developing a sense of agency, and retaining deep core knowledge that will give them the skills to soar in the 21st century.

The district is also committed to valuing all students and ensuring all students reach their full potential and as a result, the Dexter Park Innovation School is the recipient of a 2016 Innovation Schools Planning Grant through the Massachusetts Department of Elementary and Secondary Education (DESE). Through this funding the Dexter Park Innovation School implemented changes in their service delivery for students with disabilities; students with disabilities are now receiving their education in the general education classroom with their peers rather than in the former pull-out model. As a result, the school has seen a two-year increase in the proficiency rates for their students. Students with disabilities are achieving at rates similar to their general education peers for the first time in many years. This inclusive model of education is gradually moving the school forward on their trajectory out of the level 3 designation the school received by DESE in 2014.
Guiding Principles

The Orange Elementary Schools are committed to preparing their students for the future and providing their students with the necessary skills to be successful adults that contribute to the local and global communities. However, the teaching and learning of these skills do not happen in small classrooms with slate chalkboards at the front of the room and individual desks in a row. The current facility the students are working in is preparing them for the industrial assembly line, not for new fields such as: sustainability developers, data scientists, and application developers.

Instruction needs to be flexible and multi-purposed. It needs to be adaptable to the changes students, teachers, education, and the community will face in the years and decades to come. As our society is transforming from consumers to producers, so must our schools. The environment we provide for our students must allow for deep learning and mastery of skills, it must also provide students with the social environment for learning. Not only does the future require the hard skills of facts and figures but it requires the soft skills of collaboration, resilience, and perseverance. The classroom is not about getting it right the first time, but figuring out what went wrong and how to learn from it, how to refine products and process them, and how to make the world that students live in a better place. The environment in which students learn must be conducive to this practice and allow for experimentation, revision, collaboration, and the sharing of thoughts and ideas. As a result of this, student learning must embody the following guiding principles.

- **Curriculum:** Students are provided a curriculum that is aligned to State standards which allows students to develop a deep mastery of core content. All curricula and curricula materials are research based and employ best practices to meet the diverse needs of students.
• **Instruction:** Instruction is delivered in an apprenticeship model and is differentiated to meet the needs of diverse learners. The school supports an inclusion model so that all students regardless of program needs (i.e. ELL, special education, etc.) are addressed (as appropriate) in the general education setting. Instruction also includes the use of technology and it is embedded in the core curricula not as a stand-alone entity to be taught, but rather as tools to be utilized to enhance and deepen learning. In addition, instruction must allow for students to be able to fluidly apply learned skills to new and various situations and experiences.

• **School Climate and Culture:** Promoting safe and supportive learning environments that address the social, emotional and health needs of all students is critical for student success. This establishes a shared set of expectations for behavior, safety, and classroom environments that support student learning and wellbeing. Also, connected to this principle are developing behavioral norms and expectations for all students, which promote individual and group relationships. In this guiding principle, is professional development on *Positive Behavioral Interventions and Supports* (PBIS) in the classroom that allow all students to reach their personal best. The partnership between school, home, and the community is important to building a school culture and climate that address these needs. Having space at the school, such as a Family/Community Resource Center, would be a positive asset that would help to facilitate this process and philosophy.

• **Educator Growth:** Supporting educators through professional development that is sustained, high quality, and research based is important for student success. Through the individualization of professional development, teachers are able to build the specific skills and capacities that they identify that will lead to maximum student achievement and proficiency.

**District Curriculum Goals 2016-2020**

The school and its educational programing need to be the extension of the student’s daily experience; the district and school have implemented a **PEAK Action Plan**: students understand the **Purpose** of what they are learning or demonstrating -- it serves a purpose for them to be able to complete an authentic task (personalized learning), answer or research a problem, or find a solution to a question -- in short to give them the skills and expertise to be ready for tomorrow; to embody the **Essentials** skills needed to be successful in an ever-changing future, to have opportunities to develop **Agency** and find their voice, all while maintaining a positive growth mindset, and to master the necessary skills that allow for a deeply retained foundational **Knowledge** base. In all of these areas, **PEAK, personifies** the district and schools’ goals and its plan for educating ALL students.
The district has moved towards an apprenticeship method of instruction for students. This methodology encourages students to be active learners in and outside the classroom, Curricular programs such as readers workshop, writers workshop, guided math, math centers, thematic social studies units, and hands on science experiments embrace this philosophy. This allows students to take risks in their learning and attain a deep mastery of core knowledge while developing grit and perseverance; because the district has embraced this methodology of teaching, adequate classroom space is crucial in ensuring students have opportunities to employ such learning independently, in pairs, small groups, and in whole group formats. Classrooms should be at least 1000 square feet in size to ensure that students have opportunities to practice and master the skills and knowledge necessary for them to be successful, autonomous, and proficient learners.

Objectives of Program Elements Associated with the Subject Facility: 21st Century Learning

While the Orange Elementary Schools move forward in educating its students for the future, it is apparent the facility in which they teach their students is in the past. Teaching students the four C’s (critical thinking, communication, collaboration, and creativity) of 21st century learning requires both a different mindset and environment than teaching the three R’s of the past. While administrators and educators have embraced and moved forward with a change in mindset, the physical environment in which they teach remains a challenge. As online learning, blended classrooms, virtual experiences, and global communications increase, students require space where they can research and design, collaborate and create, present and connect, and be part of an ever widening global community.

The new school must be flexible and multi-proposed, and while the current schools’ facilities are teacher centric; however, the new school building needs to be learner centric. In order to do this, we need to ensure students can fully embrace the core mission of the district and school:

- **Collaboration and Communication**: developing relationships and teamwork, becoming effective communicators both inside and outside of school where students learn understanding towards others and how to express themselves in person and other mediums.
- **Empathy and Caring**: developing and maintaining integrity and citizenship, developing understanding and cultural competencies that embrace a both a local commitment and a global awareness.
- **Learning to Learn**: mastering core content and being able to use the knowledge and skills obtained to deepening their own personal learning in new and flexible ways, using technology purposefully to become autonomous in learning, and becoming critical thinkers and problem solvers.
Curiosity, Imagination, and Joy: generate excitement about learning, being adaptive and creative, and inventive thinkers.

Growth Mindset: developing risk takers who are resilient, agile, and flexible yet who maintain their unique individuality.

These elements are applicable for both a PreK - Grade Six elementary school and a Grade Three through Grade Six elementary school.

2.2: GRADE CONFIGURATION

Current and Proposed Grade Configuration

The current grade configuration of the Dexter Park Innovation School is grade 3 through grade 6; however, given the declining population in the district and the needs of the community, a viable option for the new school building may be preschool through grade 6.

Advantages of Current and Proposed Grade Configurations

The current grade configuration separates the primary grades from the upper elementary grades to allow for a more developmental early childhood approach for the district’s youngest learners. While this approach has allowed the district and the schools to tailor its education to the developmental levels of students, it has caused a strain on district’s resources. Since each school is small, the availability of services such as art, music, PE, and ELL instructors are shared among the buildings; this often results in valuable time lost as teacher travel between buildings and it divides durable resources.

An advantage to combining the two schools into one building would allow resources to be centralized and personnel to be more flexible in their delivery of services to all students. It would also provide the community with a single school in which all of their elementary level children would attend allowing the school/community relationship to deepen over time as there would be fewer transitions for students and families.

2.3: CLASS SIZE POLICIES

District Policies, Targets, and Guidelines by Grade

While district’s total enrollment data has declined steadily over the past 30 years, its subgroup populations have increased resulting in the demands being placed upon a school building not designed to deliver such alternative services. Additional space has been required for students to receive services such as: speech therapy, occupational therapy, physical therapy, counseling services, space for individualized and small group instruction for ELL students and space for academic interventions.
In addition, due to declining enrollments and educational funding challenges, the number of general education classes have been reduced resulting in an increase in overall class size, for example, last year four classrooms at grade two with approximately 20 students, were reduced to three classrooms at that grade level with 26 students per classroom. The classroom teacher who had previously been assigned as a grade two classroom teacher was assigned to position working with ELL students at the two elementary schools due to the need to provide ELL services that were historically not required at the elementary schools.

It is anticipated by the 2022 school year, that there will be three classes at each grade level for grades three through six and 4 classrooms for grades kindergarten through grade two. However, given unforeseen changes in populations, occasionally a grade level will have a significant increase in enrollment that will necessitate an additional classroom at that grade level and this increase in enrollment will need to be accounted for as the students advance through the school, in anticipation of this need, two bump classrooms are proposed -- one at the primary level and one at the upper elementary level for a Pre K through grade six school and one bump classroom for a grade three through six school.

The district at one time had three preschool classrooms; however, they were forced to reduce to two classrooms due to budgetary issues. There is currently a wait list for parents to enroll their children in preschool. It is the ultimate goal of the district to offer universal preschool to all four year olds. The district has made the intentional decision to focus heavily on early intervention at the early childhood level to provide students with strong academic and social emotional foundations. This determination was based on the low district churn rate; students who enter kindergarten are the same students who graduate elementary school in grade six. This should be a focus of the new building design should the new school building address the needs of Pre K through grade six students,

The district has tried to keep class size at 20 students in grades K through two, and 25 students for students in grades three through six, with the cap for preschool at 15 students; however, classes frequently exceed the desired class size.

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**Table 4**

Orange Elementary Schools

Educational Program - 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrollment</th>
<th>Students with Disabilities</th>
<th>English Language Learners (ELL)</th>
<th>First Language not English</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>592</td>
<td>26.5%</td>
<td>1.5%</td>
<td>20.9%</td>
</tr>
<tr>
<td>2017</td>
<td>629</td>
<td>24.4%</td>
<td>1.4%</td>
<td>20.1%</td>
</tr>
<tr>
<td>2007</td>
<td>792</td>
<td>17.9%</td>
<td>0%</td>
<td>14.9%</td>
</tr>
<tr>
<td>1997</td>
<td>899</td>
<td>20.8%</td>
<td>0%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

*Data from DESE School and District Profiles: http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=02230000&orgtypecode=5&leftNavId=305&&fycode=2018*
Current Average Class Size by Grade

The number of required classroom for our current enrollment are as follows:

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher Hill Elementary School</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| Preschool | 2 classrooms | 53 students | 1.5 classrooms (50 students) - *16.7 per classroom
| Kindergarten | 4 classrooms | 71 students | 4 classrooms (75 students) - 18.75 per classroom |
| Grade 1 | 3 classrooms | 67 students | 4 classrooms (71 students) - 17.75 per classroom |
| Grade 2 | 3 classrooms | 70 students | 3 classrooms (67 students) - *22.33 per classroom
This exceeds the district goal of less than 20 students; however, 4 classroom would mean less than 17 students per classroom and is not financially feasible for SY 2019-2020 |

The district has made a commitment to intervene at the primary grades with the expected results being that early intervention will close gaps in students’ academic and social emotional learning. It is anticipated that over time this will result in a decrease in special education referrals and an increase in students’ proficiency in reading and mathematics.

Dexter Park Innovation School

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 3</td>
<td>4 classrooms</td>
<td>77 students</td>
<td>3 classrooms (70 students) - 23.33 students per classroom</td>
</tr>
<tr>
<td>Grade 4</td>
<td>3 classrooms</td>
<td>65 students</td>
<td>3 classroom (77 students) - 25.67 students per classroom</td>
</tr>
<tr>
<td>Grade 5</td>
<td>4 classrooms</td>
<td>97 students</td>
<td>3 classrooms (65 students) - 21.67 students per classroom</td>
</tr>
<tr>
<td>Grade 6</td>
<td>4 classrooms</td>
<td>88 students</td>
<td>4 classroom (97 students) - 24.25 students per classroom</td>
</tr>
</tbody>
</table>

Proposed Changes

Whether a new school is designed and built for grades PreK through grade six or for grades 3 through grade six, it is anticipated that the average class size for the next decade is
approximately 20-25 students, classrooms will need to have a substantial square footage (at least 1000 sq. ft.) in order for whole group, small group, and for 1:1 instruction to occur. As the schools provide inclusive services for students: students with disabilities, ELL learners, and Title I and other interventional support services. Classrooms will need to allow for several types of instruction to occur simultaneously; an open space concept, that allows for a visual line of student supervision, yet provides the private space for small groups of students to receive individualized support or to work independently is the ideal design.

In addition, the schools have moved to a 1:1 program (Chromebooks/tablets) so all classrooms will need to be able to access this technology to enhance their learning and the space needs to allow for and prepare for future technological advancements.

2.4: SCHOOL SCHEDULING METHOD

Schools currently schedule students into various grade levels based upon students' needs. Students requiring special education services will be placed in classrooms which employ a co-teaching model (a general education teacher and a special education teacher). To the best of the school’s ability, special education students are placed among all classrooms so that all classes are heterogeneously grouped. However, due to the limited resources available, some classrooms will contain more students with IEPs than other classrooms so that special education services can be appropriately delivered.

In addition, all ancillary services are, whenever possible, delivered via a push in model so that students continue to receive the maximum amount of time on learning and are with their grade level peers; such push-in services will require that classroom have adequate space available (1000 sq. ft.).

2.5: TEACHING METHODOLOGY & STRUCTURE

Administrative & Academic Organization/Structure

The Orange Elementary Schools are currently organized around grade level teams. Each team meets for a PLC four times weekly for 30 minutes. During PLCs, teachers are engaged in a variety of practices such as curriculum review, student data analysis, implementation of school initiatives, and lesson planning. Each grade level is supported by special education and ELL teacher(s) depending on the needs of their specific grade level. These PLC meetings typically occur within the classroom while students are participating in such courses at physical education, music, art, etc.; however, depending on the content being delivered (such as health class) the general education classes may be utilized at this time, this will necessitate teachers having use of alternative space within the building such as the school conference room, media center, or Family/Community Resource Center for their PLC meetings.

At the administrative level there is a principal at the Fisher Hill Elementary School and a principal at the Dexter Park Innovation School. While grade level teachers, guidance, and nurses are assigned to a specific building, several staff members are shared among the two
schools. These staff members include: the PE/health teacher, the art teacher, the music/band teacher, the computer teacher, the ELL teacher, and the district mathematics coach.

Under the proposed changes, the schools would maintain a single principal who would oversee both the Fisher Hill Elementary School and the Dexter Park Innovation School. A vice principal/teacher leader would be hired to oversee the daily running of each building. Should the two buildings merge into a single setting, the building would maintain a single principal and designate subordinate administrative position(s) to act as either vice principal/teacher leader for the school. The combination of such a school would allow for a smoother deliver of supplementary courses such as art, music, PE/health, etc., with less time spent on teacher travel among schools and more time on delivery of services for students.

Currently students in grades 1 through grade 6 (preschool/kindergarten schedule listed further below) follow a typical schedule such as the one listed below for the school days that are from 8:25 am - 2:55 pm. There is a 5-minute transition time built it for arrival, dismissal, and lunch/recess.

**Grades 1 - 6**
*(the same schedule would be in place for a grade 3 through grade 6 school)*

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
</tr>
<tr>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
</tr>
<tr>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
</tr>
<tr>
<td>40 minutes Passion Project</td>
<td>40 minutes Art</td>
<td>40 minutes Music</td>
<td>40 minutes PE/Health</td>
<td>40 minutes Computers</td>
</tr>
<tr>
<td>60 minutes Writers Workshop</td>
<td>60 minutes Science or social studies</td>
<td>60 minutes Writers Workshop</td>
<td>60 minutes Science or social studies</td>
<td>60 minutes Writers Workshop</td>
</tr>
<tr>
<td>(alternate by units)</td>
<td>(alternate by units)</td>
<td>(alternate by units)</td>
<td>(alternate by units)</td>
<td>(alternate by units)</td>
</tr>
<tr>
<td>30 minutes Lunch</td>
<td>30 minutes Lunch</td>
<td>30 minutes Lunch</td>
<td>30 minutes Lunch</td>
<td>30 minutes Lunch</td>
</tr>
<tr>
<td>30 minutes Recess</td>
<td>30 minutes Recess</td>
<td>30 minutes Recess</td>
<td>30 minutes Recess</td>
<td>30 minutes Recess</td>
</tr>
<tr>
<td>90 minutes Mathematics</td>
<td>90 minutes Mathematics</td>
<td>90 minutes Mathematics</td>
<td>90 minutes Mathematics</td>
<td>90 minutes Mathematics</td>
</tr>
</tbody>
</table>
The above schedule illustrates the core academic and ancillary classes that all students participate in on a weekly basis. Grade level schedules will alter in terms of subject times and days due to scheduling needs and building logistics. Teachers participate in grade level PLCs during the unified arts (UA) class times when their students are seeing the UA specialists.

Regarding the structure of the new building, design should promote safety and efficiency. A centralized entrance that allows for a more supervised entrance to the building by visitors is critical. During drop-off and pick-up times, students who ride the bus should have a separate entrance in order to alleviate traffic congestion providing a safer environment for students. Students being dropped off by parents would enter through a carline entrance, staffed by faculty during drop-off and pick-up times, or through the main entrance of the building when being escorted by a parent or guardian.

Security should allow for a section of the building to be isolated from the academic classes but still allow for community access. This section of the building would include, professional development facilities, administrative offices, nursing/therapists’ suites, the cafetorium, the gym, a family resource center, and other facilities that may be utilized by the community after regular school hours.

**Curriculum Delivery Methods & Practices**

All curricula listed below is applicable to a Pre K through grade six school or for a grade three through grade six school.

**English Language Arts**

The Orange Elementary Schools implements a balanced literacy model comprised of a readers and writers workshop model of instruction. Students engage in reading authentic literature and writing for authentic purposes. Teachers present mini-lessons of grade level standards to the whole group and then demonstrates application of these standards; using the gradual release of responsibility model: students are then supported in their mastery of the presented skills or content as the support is gradually faded until the student is able to successfully demonstrate mastery independently and in a variety of modalities and for a variety of purposes.

The readers workshop is comprised of a daily 90-minute block. There is a group mini-lesson and application of the lesson that is approximately 20 minutes in length. This lesson will focus on grade level standards and explicit reading skills and strategies. The following 60 minutes is broken into segments, depending on the lesson, where students will: work with a peer, receive additional direct instruction in a small group, work 1:1 with a teacher, tutor, or interventionist, read independently, participate in reading conferences, or conduct research. The remaining 10 minutes of the literacy block involves the class coming back together, as a whole, to share and reflect on the day’s lesson and to provide and receive feedback.

Two to three times a week, students participate in writer’s workshop. Writer’s workshop follows a similar format as readers’ workshop, but is 60 minutes in length. Again students are
presented with a mini-lesson in which the teacher introduces a new skill or strategy and gradually releases the students to work independently for approximately 15-20 minutes. As with reader’s workshop, students then either receive direct, explicit small group instruction, 1:1 conferencing, write independently, engage in peer revision and editing, or conduct research for approximately 30-35 minutes. The class then comes together again as a whole, to reflect and share their learning. Students often share their writing in an “author’s chair”.

The classroom space needs to allow for plentiful and multiple bins of books and materials that are readily available. A screen for projecting, documents, cameras, and internet access will give students the ability to see, share, and participate in whole group instruction.

Display and storage space must be readily available to present and save lesson artifacts and anchor charts for students’ reference and future use. Additional space is needed so that multiple educators can work with small groups of students, while allowing other students to work independently. Students need space to work independently that is comfortable and allows for extended time reading, writing, and collaborating. The group and independent learning spaces need to maintain a visual line of supervision for teachers to ensure students safety and time on task. This space could be within the classroom or directly outside the classroom; however, a direct visual line of sight would be needed for either option.

Mathematics

Students currently receive 90 minutes of mathematics instruction daily. This is broken into a 60-minute mathematics block (grade level instruction) and 30 minutes of remediation/enrichment where instruction is tiered and based on students' specific needs. Mathematics is also implemented using a modified workshop model in which there is an initial whole-class mini lesson. Students then break-off to independent application, guided math groups, or centers. The class will reconvene at the end of the block to review and reflect on the lesson. During this time, students share their learning. The math block contains multiple opportunities to collaborate with peers and to engage in accountable talk.

Science/STEM

Science instruction is taught on opposite days from writer's workshop. The students participate in the science curriculum two to three times per week for 60 minutes completing a unit of study; these units alternate with the social studies curriculum during the course of a school year.

The science curriculum is made up of units of study; for example, grade six covers units on: the human body, density, and properties of matter. Teachers use FOSS kits as their primary teaching resources; however, they supplement the curricular materials with online resources and materials.

The philosophy of the science curriculum is to provide students with hands-on, authentic experiences. The goal is for students to gain a deep understanding of the scientific principles of a topic and understand how this knowledge applies to everyday life. Students are encouraged
to explore and experiment using the newly taught principles and theories. Science is taught using a constructivist model where students spend the bulk of the class time engaging with materials in a collaborative setting where the teacher facilitates students’ learning through coaching and exploration. Direct, explicit instruction of grade level standards is reserved for the whole class mini-lesson or follow-up small group or 1:1 instruction.

In addition, to their core science classes, students participate in addition STEM opportunities. Each teacher has implemented makerspace into his/her classroom weekly to encourage students creative thinking and problem solving, to encourage students to pursue their individual interests, and to engage in autonomous learning as part of their “passion project”. Such learning occurs both inside the school and outside on its campus.

Unfortunately, the current facility does not allow for this type of instruction to readily occur. There are no science labs, computer labs, or central location for these activities to occur. Rather the science “labs” are conducted in classrooms that are not equipped with the space or materials (such as sinks, countertops or tables, etc.) to allow for deep learning and hands on activities. Again, the new school building must account for the ever changing technology and be adaptable to these changes in order to meet the ever changing educational needs of students. Regardless of the new school building being a Pre K through grade six or a grade three through grade six school, adequate storage, sinks in each classroom, and technology needs would need to be addressed.

**History/Social Studies**

The History/Social Studies curriculum is often thematic based and aligned with the readers and writers workshop curriculum. As with the Science/STEM curriculum, the History/Social Studies curriculum is 60 minutes in length and taught on opposite days from writers’ workshop and the units of study alternate with the science/STEM curriculum. This curriculum is also presented using a constructivist model with students independently exploring and researching topics thus taking a more active ownership of their learning.

Students study a specific theme or topic, reading multiple texts and researching various topics and points of view. Students then often present their knowledge via writing projects, presentations, or personalized learning projects determined between teacher and student. As with the other areas of the curriculum, the space in which students work needs to allow for whole group, small group, and individualized learning. Students need to be able to work collaboratively, yet still have options to work independently in quiet locations. In addition, the students need space to be able to present and showcase their work.

**World Languages**

The Orange Elementary Schools do not currently offer world languages. Instruction in world languages is not offered until students enter secondary school. A world language immersion program is something that the district would explore should the following occur: 1) budgetary constraints allow for such a program; however, this priority would be after the expansion of any
Pre-K programming being offered; or 2) should the new school building be built on the campus of the secondary regional school and the world language staff at the regional school has sufficient time in their schedules to expand to the elementary grades and the elementary school could absorb funding for this addition to the curriculum.

Academic Support Services: English Language Learners (ELL)

Another Federal program that has seen an increase in their student body is the number of English language learners. Prior to the 2016 school year, the Orange Elementary Schools did not have any identified English language learners. Fast forward to 2019, and there are now twelve ELL students in the elementary school; of these twelve students there are five first native languages represented: Spanish, Urdu, Hindi, Swalli, and Portuguese. Over 50% of the ELL students entering the district are almost completely non-English speakers and are categorized as a level 1 ELL student requiring 90 minutes of direct ELL instruction daily, another 25% are level 2 ELL learners who continue to require 90 minutes of instruction daily, and the final 25% are level 3 and 4 ELL students who, depending on their individual needs, can require between 45-90 minutes of support daily.

The arrival of the ELL students has necessitated the reallocation of a general education teacher to that of an ESL teacher to provide services. While this individual mostly provides services using an inclusionary model in the general education classroom, there are times when it is necessary, for small-group or 1:1 pull-out services to occur. Currently, this results in the students receiving services in any available space such as the library, hallway, or small alcoves in the building.

While the ELL population in Orange, MA remains relatively low, there has been an increase over the past several years, with it being anticipated to grow even larger in years to come. This is following national trends; “in 2012-2013, there were 4.85 million ELLs in U.S. schools, comprising nearly 10% of students in U.S. public schools (Ruiz Soto, Hooker, and Batalova, 2015). ELLs are the fastest-growing student population in the country, growing 60% in the last decade, as compared with 7% growth of the general student population (Grantmakers for Education, 2013).”

In planning for an increase in the future ELL population, the new school building will need to allot for space within the classroom for small group instruction and spaces outside the classroom that are adequate for small group instruction and 1:1 tutoring and support. A separate ELL classroom would need to be available for students. While these spaces can be small they still need to have the same technology resources and full-size general education classrooms. In addition, outreach space needs to be available to the families of these students, such as a designated Family/Community Resource Center in the school.
Academic Support Services: Title I

The Orange Elementary Schools implement Title I school wide programs. They are eligible to run as school-wide programs due to the percentage of economically disadvantaged students in the district (56.4% -- 2018).

http://profiles.doe.mass.edu/general/general.aspx?topNavID=1&leftNavId=100&orgcode=02230000&orgtypecode=5.

The schools currently use the majority of their funding to provide a Title I English language arts teacher at the primary and upper elementary level and an additional Title I para educator at the primary grades. These individuals provide supplemental reading intervention services to struggling readers in grades kindergarten through grade 4. Using available State and local assessment data, progress monitoring information, and teacher referrals the Title I personnel meet with targeted students daily for 30-40 minutes for direct, explicit reading instruction which is in addition to their regular core reading program. In the primary school, the services are administered in a pull-out model for grades kindergarten through grade two and for grade 3 and grade 4 the services occur in the general education classroom using an inclusionary model. If a Pre K through grade six school was designed and built, then a Title I classroom would need to be in place due to the developmental needs of the students -- primary readers often read aloud and small group instruction in the classroom can be disrupting to other students. In a grade three through grade six school, supplementary instruction is often able to occur in the classroom with little disruption to the rest of the class; such small group instruction can occur within the classroom in areas designed for small group work or just outside the classroom in adjacent spaces.

Student Guidance and Supports

In order to promote student success, schools not only need to be equipped to educate students academically, they must also be prepared to meet the social, emotional, and physical needs of students.

On August 13, 2014, a law titled The Safe and Supportive Schools Framework (MGL Ch. 69 Section 1P) was enacted into law. These provisions establish a statewide “safe and supportive schools’ framework” to assist schools to create a safe and supportive learning environments “that improve educational outcomes for students.” Elements in the framework that would be necessary in a new building include:

- Access to resources and services within the school and community
- Areas for confidential conferencing with students and families
- Environments that offer:
  
  High quality instruction with school-wide academic standards: Students come to school with a variety of skills and abilities, and the mantra “All children can learn” highlights the capacity for students to obtain new skills to be successful in life. Setting high standards and expectations for all students means recognizing the individuality of each student
and identifying instructional techniques that support his/her growth. This requires maximizing time spent on learning with opportunities for individualized instructional supports.

Screening of academic and behavioral development: Monitoring the academic and social, emotional, and behavioral development of each student can foster effective learning of all students and can identify when additional supports are needed. Through universal systematic screening procedures, early intervention and support services can be put into place that can prevent the development of academic or social/emotional difficulties. This student data can be used by teachers to inform and improve classroom environments, instruction techniques, etc.

Predictability: Classroom and school environments that are predictable can be particularly helpful for all students, but especially for those with behavioral health needs. This includes:

a. Clear behavioral expectations of students;
b. Established school and classroom routines;
c. Clearly communicated class schedules;
d. Predictable and positive responses/reinforcement, even when students require correction on behavior or academics;
e. Carefully planned transitions involving new people and places, and reminding students of classroom rules as they move on to new activities.

Effective primary prevention programs: These programs are most effective when consistently implemented by teachers, and also require the involvement of the entire school community (e.g., bus drivers, lunch, and janitorial staff, etc.). A focus on the following skills is recommended when making a selection for a primary prevention program: Model, teach, and reward pro-social, healthy and respectful behaviors. Similarly, problem behaviors and consequences are clearly defined. Utilize positive approaches to promoting behavioral health, including collaborative problem solving, resiliency, team work, and positive behavioral supports that aid in social and emotional development. Sensitively address behavioral issues in classroom so that learning can continue and the child is not unnecessarily removed from class. Teach students to modulate emotions, recognizing the association between positive peer relations, adult connections, and self-regulation and the impact on academic success. Utilize effective approaches to address difficult emotional states (e.g., anger, jealousy), and address the underlying reasons for difficult behaviors by identifying and processing feelings. Develop collaborative discipline approaches that include student input, which balance accountability with an understanding of underlying behavioral health needs.

Positive relationships between students and adults: Supportive connections between adults and students can serve as a foundation for the development and promotion of behavioral health. Supports to encourage positive relationships between students and
adults can include: opportunities for staff and students to develop relationships that extend beyond the academic role (e.g., at lunch time or with an extracurricular project). Promotion of student engagement in school events and extracurricular activities (e.g., sports, clubs). Thoughtful attention to fostering relationships with adults with whom the student already has a natural affinity. This can also mean providing on-site parent workshops and resources, by allocating for a parent resource center such activities can occur on-site for families. In addition, the community would be able to access this space for events such as flu clinics, town meetings, and community speakers on various topics such as health, education, and community services.

**Students’ strengths (islands of competence):** Where appropriate, work from students’ abilities, strengths, and interests in specific academic classes or extracurricular activities as a base for helping them with academic or behavioral health challenges. Communication with families and any after-school and community programs that support development in these areas of interest can reinforce student learning and build opportunities within the school environment.

**Physical well-being:** Students’ physical health, including dental and nutritional needs, greatly impacts their ability to meet the academic and social demands of the school environment.

**Safe learning environments:** School environments can be physically, socially, and psychologically safe for all students. Safe classrooms have clearly established behavioral expectations and crisis or safety plans in place to deal with difficult and unsafe situations. Safe classrooms also have clear distinctions between office-referral and classroom-managed behavioral difficulties to prevent unnecessary or excessive disciplinary referrals. In situations where problem behaviors occur, options exist to allow for classroom instruction to resolve the situation. In case of an emergency in the classroom, all students can be familiar with the school’s emergency plans.

**Involvement of students in evaluating the effectiveness of programs and services:** Students hold a unique and critical perspective on the school experience and the programs and services available. Creating opportunities to hear the perspective of the students is critical to maintaining effective programs; yet this also requires hearing from students who are not necessarily experiencing success in school. Fostering student leadership and supporting positive youth development may require school staff to accept feedback that creates discomfort but this feedback also has the potential to identify challenging situations for struggling students. Enabling a broad range of students, not just the “typical leaders” to participate in evaluation and decision-making is beneficial.

- **Collaboration with families**

Families are encouraged to participate as partners in every facet of the education and development of their children. Collaboration among schools, behavioral health
providers, and families is a central theme of each part of this Framework. Providing resources for families and fostering effective communication with them are essential elements of successful collaboration. Schools and communities will need to be intentional and deliberate in order to fully engage families from all cultures, languages, and socio-economic levels.

Currently, the Orange Elementary Schools utilizes the regional secondary school in the town, the Ralph C. Mahar Regional School, for many of its community outreach events such as the recent “Raising A Thinking Child” workshop as neither elementary school had adequate facilities to host such an event that spanned eight weeks. The current elementary schools can often “make do” for single events by relocating classes, shutting down spaces in the building, or canceling activities; however, long-term or multi-day events either do not occur or must occur off site. For example, when the dental clinic comes to provide dental cleaning and fillings for students, either a conference room is closed, meaning IEP meeting may need to be rescheduled or these dental services are provided on stage at the school’s cafetorium/gymnasium behind a curtain with little privacy. A Family/Community Resource Center would allow such services to occur with no disruption to the education students receive.

By including a Family/Community Resource Center within the school, the Orange Elementary Schools will be better equipped to meet the various needs of all their students and develop strong relationships between the school, community, and families.

2.6: TEACHER PLANNING & ROOM ASSIGNMENT POLICIES

Existing Planning Spaces & Planning Time

Much like the special education and counseling services that will require a suite of offices, so does administration, office personnel, maintenance personnel, IT personnel, dietary personnel, educators and para educators. These individuals will require space for the “backroom” planning of the school day. These offices will need to be located in specific space throughout the building depending on their role and function in the school; for example, administration and front office personnel will need to be located near the main entrance to the school, while maintenance personnel should be towards the rear of the school for shipping and receiving to function smoothly. A flexible space for each grade level will support co-planning, collaboration and professional learning. This space could also be accessed by students for the same purposes. While a great deal of planning and provisioning for lessons can occur in the classroom and within the common space of the building, there does need to be space available for educators to meet with one another to be able to have a private space in which to contact parents, guardians, and other individuals involved with the care and well-being of students. This space needs to be more than a traditional faculty lounge with a photocopier and coffee pot; the space needs to allow for privacy for both school related and personal business (telephone calls) to occur. This space also needs to be located near or have a separate lavatory extension for
private educator use separate from the general public. Such an area need not be large but rather adequate to ensure the privacy of students, families, and staff. This space also needs to account for the need for para educators, volunteers, and visiting support personal to have a secure location to store their private belongings such as: coats, purses/backpacks, lunches, etc.

**Professional Development Practices**

The district provides opportunities both on-site and off-site for teachers to participate in a range of professional development opportunities. All professional development provided is in accordance with *Massachusetts Standards for High Quality Professional Development* (HQPD) [http://www.doe.mass.edu/pd/](http://www.doe.mass.edu/pd/). In addition, the district recognizes that “one time” options do not relate to HQPD. One time offerings are effective in training teachers in how to utilize something -- such as how to administer a specific assessment or how to use a specific program. However, HQPD will require additional sessions over time and require that the characteristics of HQPD are present.

Just as teachers are expected to differentiate instruction for their students, so does the district differentiate professional development for teachers. As part of their Individual Professional Development Plan (IPDP), teachers are expected to meet with their evaluator and outline the professional development they will need to meet their educator goals and to also meet the State relicensure requirements. Teachers are then encouraged to use district professional development days to obtain the PD outline in their IPDP.

Broad-based professional development is offered to the staff and faculty based on school-wide initiatives outlined in district and school improvement plans and by needs generated through a review of school data. These offerings are based on data analysis at the district and school level.

The new school, whether a Pre K through grade six school or a grade three through grade six school, will need to allocate spaces within the building for professional development to occur. Some professional development will occur 1:1 in class through teacher coaching. Other professional development will occur during teacher PLC time and can happen also within the classroom or within spaces within the building dedicated for small group instruction. Yet other professional development will require a larger venue such as use of a conference room or the Family/Community Resource Center. The location of the professional development will depend on the audience, purpose of the professional development, and the number of educators (or families) participating in the activities. The new school will need to adequately account for these various types of offerings.

### 2.7: PRE-KINDERGARTEN

**Current Offerings, Practices, & Location**

The district currently offers Pre K education to a small number of students. The district employs 1.5 FTE teachers for the positions. The classes are currently divided into the three-year old program and the four-year old program. There are three options available: the five day a week
program which is available Monday through Friday, the three day a week program which is available on Mondays, Wednesdays, and Fridays, and the two day a week program which is available on Tuesdays and Thursdays. The programs are offered for half a day with both morning and afternoon sessions. The full-time preschool teacher provides service five days per week for both the morning and afternoon. The half-time preschool teacher offers services only in the morning and provides classes for the three-day week program and the two-day week program. At this time, there is a small number of children who attend both the morning and afternoon session of PreK as determined by their IEP. These children have a 1:1 paraprofessional who is assigned to them and who provide coverage during the break time between sessions.

Each PreK class is staffed by a licensed Early Childhood teacher and has a paraprofessional assigned to the room to meet the State’s Early Education and Care (EEC) guidelines. Additional paraprofessionals may be present if a child has a 1:1 paraprofessional indicated in his/her IEP.

### Pre-Kindergarten

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Time Four-Year Old Program</strong></td>
<td>AM Session M-F, PM Session M-F</td>
<td>AM Session M-F, PM Session M-F</td>
<td>AM Session M-F, PM Session M-F</td>
<td>AM Session M-F, PM Session M-F</td>
<td>AM Session M-F, PM Session M-F</td>
</tr>
<tr>
<td><strong>Break Between Sessions</strong></td>
<td>Teacher PLC, Teacher Prep, Teacher Lunch</td>
<td>Teacher PLC, Teacher Prep, Teacher Lunch</td>
<td>Teacher PLC, Teacher Prep, Teacher Lunch</td>
<td>Teacher PLC, Teacher Prep, Teacher Lunch</td>
<td>Teacher PLC, Teacher Prep, Teacher Lunch</td>
</tr>
<tr>
<td><strong>Half Time Three-Year Old Program</strong></td>
<td>AM Session M, W, F</td>
<td>AM Session T, TH</td>
<td>AM Session M, W, F</td>
<td>AM Session T, TH</td>
<td>AM Session M, W, F</td>
</tr>
</tbody>
</table>

The Pre K students are heterogeneously grouped and are comprised of students with IEPs and general education students. Pre K is provided at no cost to the parents; however, transportation is only provided to students with an IEP who have transportation listed as an accommodation. At one time the district employed two full time preschool teachers but was forced to reduce staffing and PreK openings due to funding. Massachusetts does not currently fund Pre K education unless a student receives special education services. It is the ultimate goal of the district to fund a full day four-year old preschool program in the future. Current research has demonstrated the positive effects on full-day preschool programs and their ability to reduce the effects of poverty:
- Low-income children with high-quality early learning experiences are 30% more likely to graduate from high school, and more than twice as likely to attend college.
- At age 40, adults who participated in high-quality early childhood education programs during their preschool years were more likely to be employed, and had 36% higher median annual earnings than the control group.
- Currently, 55.4% of Orange’s school age children are designated as living below the poverty line as compared to 31.2% of the State

Given the research and data, universal Pre K for the families of Orange will have positive, life changing ramifications for students and the community at large.

http://www.strategiesforchildren.org/doc_research/09_HQEE_Student_Achievement.pdf
http://www.strategiesforchildren.org/FastFacts/Orange.html

How Curriculum is Delivered

Curriculum is offered through a developmental play-based model. Students come together for morning (afternoon meeting), story time, and for mathematics and literacy exposure activities. Students also participate in various center based activities such as: housekeeping, dramatic play, the block center, and other teacher created centers. Related services such as OT, PT, and speech are provided in class when possible; however, some students may receive their services using a pull-out model based on their individual needs.

Proposed Changes

The district would like, in the future, to increase its Pre K offering. Should the State begin to fund Pre K, then the district will look at increasing its Pre K offerings. It is anticipated that the school would still need the two Pre K classrooms; however, an additional Pre K classroom would allow for expansion, and would be necessary as the district grows its early childhood programming. All Pre K classrooms should be equipped with bathroom facilities, furniture, and materials that are in compliance with the National Association of the Education of Young Children (NAEYC) in order to meet possible NAEYC accreditation. Should the new building encompass Pre K through grade six students, it is vital that adequate Pre K spaces be included in the building design and build.

2.8: KINDERGARTEN

Current Offerings, Practices, & Location

The district currently offers full day kindergarten to the children in Orange, MA. Each kindergarten classroom is taught by a licensed kindergarten teacher and an instructional paraprofessional is assigned to each kindergarten classroom. The district attempts to keep kindergarten class size to no more than 20 students at any given time.
How Curriculum is Delivered

The current curriculum is a mixture of stand-alone programs such as: Fundations, enVisions Mathematics, Fontas and Pinnell Guided Reading, PATHS (social emotional curriculum), and more teacher developed thematic units for science and social studies. In addition, all kindergarten students have the same access to ancillary subjects as the grade 1 through grade 6 students such as art, music, PE/Health, and computers.

Proposed Changes

The district is proposing a more developmental play based approach to kindergarten. The district recognizes that while many students meet the age requirement for entering kindergarten that there is a wide range of kindergarten readiness. The district is proposing keeping the current four kindergarten classroom; however, designating one of the kindergarten classrooms as being developmental. The plan is for the kindergarten teacher of the developmental kindergarten classroom to be dual certified as both being licensed as an early childhood educator and a special education teacher.

In addition, the new curriculum changes would embrace a more language rich environment (focus on oral language) and practices. Time would be dedicated daily to implementing a social emotional curriculum, and teachers would focus on teaching emerging literacy and mathematics skills through play and hands-on activities. An increase in the implementation of thematic units in social studies and science that encompass both literacy and mathematics skills would be implemented.

The district is also proposing a transitional grade 1 classroom for students who may need additional time to master the kindergarten curriculum. This classroom would also have an instructional paraprofessional assigned in order to meet the academic and social emotional needs of students. Depending on students' mastery of skills and readiness, they may move on to a traditional grade one classroom or move onto a grade two classroom upon completion of the school year. A student’s placement would be determined by a team of educators and the student’s parents.

2.9: LUNCH PROGRAMS

The main goal of the kitchen prep area is for a space that is adequate for the preparation, storage, and serving of meals. The Orange Elementary Schools offers both breakfast and lunch program for its students. Due to the poverty level of the community, and our Direct Certification Percentages, the schools operate under the Community Eligibility Provision which provides free meals to all students in the district regardless of eligibility.
How is the Program Delivered:

The district delivers breakfast to all students via a Breakfast in the Classroom program (BIC) model. It is anticipated the kitchen staff will be providing up to 530 breakfast servings Monday – Friday via the BIC program; four staff will be needed to satisfy the BIC program preparation, distribution, and clean-up. Students start their day eating breakfast with their peers in the classroom. This provides students with the opportunity to eat as a community and begin their day in a more relaxed manner. This also ensures that students who arrive tardy to school have the opportunity to eat breakfast. BIC has become incorporated in the morning meeting that students begin each day with as part of their opening routine. Since implementing the program, there has been an increase in students participating in the breakfast program and teachers have reported that students appear ready to learn and to participate in class. The school lunch program is delivered in the traditional manner of students utilizing the cafeteria/gymnasium for the mid-day meal. However, since the space functions as both the cafeteria and the gymnasium, this poses an issue for physical education classes as well as meal service, especially during the winter months and inclement weather. The shared space arrangement prohibits timely set up and/or breakdown of cafeteria tables, challenging the time requirements of both PE classes and lunch service.

Lunch preparation will be necessary for up to 530 students, served at two settings of approximately 265 students per seating. The lunch seating will be 30 minutes long from 11:30 am to 12:00 pm and from 12:45 pm to 1:15 pm. The staffing requirements to prepare and serve lunches is five full-time and one part-time staff; including in the full-time count, a Food Service Director.

District Proposal:

The proposal below is relevant for both a Pre K through grade six school or a grade three through six school.

A Pre K - Grade 2 (262 students) 58 preschool students are not full day attendees and do not dine with us at this time though they have in the past. Should the preschool return to a full day model, the lunchroom capacity numbers will change accordingly.

Grade 3 - Grade 6 (323 students) The district and school building committee are proposing that the new cafeteria be converted from a dual use cafeteria/gymnasium model to a cafeteria/auditorium (Cafetorium) model so that the gymnasium can be utilized throughout the entire day by students. In addition, the dining facilities for the school should be easily converted to additional space if needed. The space will need to be large enough to accommodate the entire student body including staff in a seated arrangement for performances, and approximately 150 students during any given meal time to be seated at multi seat folding tables. The space will have adequate storage along the perimeter of the room that will allow it to be utilized for other activities, such as afterschool
programming and events. There should be a separate and private teacher’s dining as required by contract.

Adjacent to the cafeteria, we will need a large kitchen with the capability of preparing 1500 to 2000 meals per day. The service area could be a two entrance, mirror image of equipment with simultaneous service on both sides, allowing a faster and more efficient service time as well as a higher number of students eating at one time. Another option would be a round or horseshoe shaped service area that could be used to offer separate stations much like a food court. Whether we agree or not, this is how our children see and purchase food in the real world. Under Offer vs. Serve in the child nutrition program, a student should be able to build their own meal. A station set up would allow this as well as increase revenue from ala carte sales. Production volumes will require adequate square footage, walk in refrigeration, walk in freezer and work space. In addition, in order to satisfy the meal programs, the necessary major pieces of equipment will include:

- Two double stack convection ovens
- 6 - 8 burner gas stove with oven and or griddle top
- Steam jacketed kettle
- Tilt Skillet
- Two Proofing cabinets
- Four holding cabinets
- 225 per hour Stainless Steel conveyer dishwasher with Booster
- 50 Dishwasher plate/smallwares racks
- 5 Tray racks
- Stainless Steel Entry and exit tables for dishwasher room
- 3 bay stainless steel pot and pan sink
- Two Bay stainless steel vegetable sink
- Two bay Chef Station Prep area sink
- Four 8’ Stainless Steel Prep tables
- Bakers / BIC Prep Center - 20’ of Stainless Counter Space
- Two Five bay hot service lines
- Two Four or five bay cold service lines
- Countertop 20 qt. Mixer with attachments
- 50 qt. Commercial Stand Mixer with attachments
- Slicer
- Robot Coupe
- Vitamix Machine
- Blast Chiller
- Utensils
- Hotel Pans
- Storage Equipment
- Mop Sink
- Ice wands
- Tray racks & shelving
Ideally, we would like a smaller space that is separate from the main kitchen prep area, much like a test kitchen. Keeping the innovation model in mind, this will offer opportunities for the culinary team to host students throughout the school day, to supplement their classroom education. The students and teachers will practice real life uses of reading comprehension, math and science while gaining important life skills. The kitchen is a space that offers many areas of opportunity to enhance education, all while learning to care for oneself. Students might prepare a dish that is part of the day’s meal for the school at large or merely experiment with weights and measures, this aligns well with the mission of nurturing the whole child and creates an inclusive atmosphere throughout the school community. This area could also be used by community members and by the family resource center for events that require a small kitchen eliminating any worry of cross contamination in the main kitchen. Allergy issues are increasing each year.

Adequate space is needed for food, chemical, and dry goods storage as well as an office space for the kitchen’s managerial staff. The office space will need to be Wi-Fi capable and have the necessary technology components to ensure that it is usable for the purposes of required daily paperwork, reporting, inventories and other necessary office duties.

Food service delivery via outside vendors (vehicle) should be accessible to the rear of the kitchen next to the storage for dry goods and refrigeration. In addition, pickup of food disposal will occur twice weekly and require vehicle access. Delivery doors must be present on a standard loading dock for delivery of all goods. Dry storage areas, chemical storage areas and refrigeration areas must remain separate according to HACCP regulations. All storage areas should be capable of storing one month’s worth of food and or supplies at all times. The Elementary schools are a designated shelter facility in the Town of Orange. Directly outside of the dining space, restroom facilities should be available for student hand washing and other needs. Hand washing or sanitation stations should also be available and easily accessible prior to entrance to the service areas.

The cafeteria dining space should be up to date and in line with today’s needs. Comfortable seating with the ability to separate areas due to allergies is required. The space should be inviting and pleasant with plenty of natural light. Menu boards or televisions would allow for school announcements, menu advertisement and nutritional information. Music in the space in often conducive to relaxation and regrouping.

A hydroponic growing stand where we can grow and harvest our own lettuces and herbs for use in the cafeteria is a wish. Not only is the unit pleasing to look at, would provide fresh and sustaining food for our students, offer teaching and learning opportunities, but would also keep the air in the space clean and fresh. The cafeteria should offer modern and sufficient recycling areas near the dish room for students to separate their lunch waste. Again, this offers a teaching and learning opportunity regarding waste, recycling, our planet and global warming. A milk carton washing station would be ideal but is not required for single stream recycling which is available to us now.
2.10: TECHNOLOGY INSTRUCTION POLICIES & REQUIREMENTS

Description of Existing Educational Technology

Currently the Orange Elementary Schools are a 1:1 device school with each student having an assigned Chromebook in grade three through grade six. Projectors are present in each classroom; however, this technology while functional, is rapidly becoming outdated.

At the Pre K through grade two level, there is a cart of Chromebooks used for students’ computer classes and testing; however, the school is not 1:1 at the current time. Each classroom has approximately half a dozen iPads for use with students, but these items are earlier versions and do not support recent updates. As with the upper elementary, projectors are present in classrooms but the technology is rapidly becoming outdated and obsolete.

Within the current schools, internet speed and connectivity are spotty and/or slow throughout the buildings. This has impacted the teachers use of technology to support students’ learning. In addition, neither library is equipped to be utilized as a 21st century learning area. There is a mobile projector available but it does not lend itself well to student use or use by the faculty for professional development.

Currently the district response for the need for assistive listening technology for hearing impaired students is on an individual basis. However, all new assistive listening technology will be purchased in compliance with universal accessibility requirements and to include all students with hearing disabilities into every program, without limits, assisted listening systems and sound amplification will be incorporated into every educational space. All staff will be trained in the use of the system and it will be used remotely from the classrooms as well, when accompanying groups of students through the building to activities outside of the classroom.

Proposed Educational Technology Objectives

The district has moved to a 1:1 program. All classrooms will need access to this technology to enhance their learning and the space needs to allow for future technological advancements. Regardless of the grade configuration of the new building (Pre K-6 or Grades 3-6), the new school will need to adequately plan for current and future technology needs.

Classrooms will need materials that support multi-purposes such as whiteboards that allow for internet access and video streaming, reliable access to the internet and to charging stations, and flexible and movable furniture. Rooms need to be able to be easily configured to suit the purpose of each lesson with minimal time-on-learning lost. Four critical elements in the 21st century classroom include the following:
**Technology Integration**
It’s no surprise that technology integration is a key aspect of modern classroom design. However, teachers and students are leveraging 21st century classroom design that utilizes these upgrades in new and different ways. These classrooms use technology as a tool to stimulate curiosity and inspire students’ desire to learn. Technology, whether it is laptops, tablets, or mobile devices, puts information at students’ fingertips and motivates them to research and make discoveries.

In addition, technology integration supports inclusive classrooms, as it allows students to move at their own pace whether they are looking for opportunities for enrichment or need help to catch up. Plus, learning at the right level and pace helps keep students engaged, which dramatically reduces inappropriate classroom behavior.

**A Flexible Layout**
Going hand-in-hand with the push for personalized learning, the driving concept behind 21st century classroom design is flexibility. Students’ days are full of choices that empower them to decide how they learn best, and they need an environment which supports that. An agile space also gives teachers the ability to respond to different students’ needs.

Typically, these classrooms include some version of a group gathering area, multiple seating options and a flex zone that can be adapted for the unique learning activities. This layout allows for a variety of grouping formats and lesson types that take into account students’ widely varying learning styles. Twenty-first-century classrooms are driven by student’s interests, and the open, flexible spaces allow students to come together to share, collaborate and create.

**Furniture for Utility**
As already mentioned, to support flexibility schools are getting rid of standard desks and replacing them with a variety of different seating options. To allow for maximum utility of space, portable furniture is a must in the 21st century classroom design. Common examples of workstation options include yoga mats, exercise balls, kidney tables, standing tables, sofas and floor tables.

On average, children spend about ten hours of their day sitting, so classroom furniture should accommodate their natural need to move. Giving students options that allow them to rock, bounce and rotate while they are sitting provides for enhanced circulation and concentration throughout the day—and all the learning benefits that come with that. These classrooms also increase functionality for students by lowering whiteboards and making materials easily accessible.

**A Light-Filled Environment**
Lighting is an important part of 21st-century classroom design. Bright fluorescent lighting is being replaced with more natural and incandescent light through the use of windows and lamps. Not only does this make students more comfortable and reduce headaches, but studies have shown that student learning rates have improved between 7 and 26 percent in classrooms that are exposed to adequate natural lighting. Flexible lighting options are also beneficial as students use technology more frequently since dimmed lights make screens easier to see.

*https://www.gettingsmart.com/2016/12/21st-century-classroom-design/
2.11: MEDIA CENTER/LIBRARY

Current Programming

While there is a room in the buildings dedicated as a library, there is no librarian or staff assigned. Books are currently housed in the locations, however, the collection needs to culled and updated. The facility is often used for teachers to use for small group instruction or for staff meetings or professional development. Since there is no individual assigned to the library, the materials are unorganized and the room is often used as a storage catchall. Teachers currently pull any appropriate materials they need for their classroom; however, there is no formal checkout system in place making the inventorying of materials difficult at best.

Current Staffing

There is no current staffing assigned to the library.

Current Hours

There are no current assigned hours for the library. Teachers utilize the materials and items at will during the current school day. Afterschool the area may be used for meetings however; those are scheduled through the building principal or designee.

Proposed Changes

The district is proposing that the new school building have an individual(s) assigned to the new library/media center. The district is proposing to house the district’s technology teacher in the library media center. This individual would also utilize the space for the instructional (computer) classes offered to students. This change would apply to either a Pre K through grade six school or a grade three through grade six school.

The library media space needs to function as a multipurpose room. As more and more literature become digitized the need for massive shelving for text will be reduced. While a library media center will always require storage and display for print materials, it will also require space for computers, projectors, and project assembly areas. Rather than having a large cavernous space, the library media center will require a central “office/desk” space for educator/staff supervision and then several small pod areas within the library media center with partitions for use by multiple individuals or groups at one time. In addition, by having several, moving partitions the space will be able to be utilized by larger groups and classes. The most important feature of the design however, will need to be the fact that a visible line of supervision must be available from the center (desk/office) area of the library for educators and staff. While there is no designated “librarian” for the area. The technology teacher will conduct classes within this space and have responsibility for overseeing the general space. Educators will be able to reserve pod areas with the space for use (per administration or his/her
The goal of this space is to provide students with a centralized space for research and exploration; for students to become self-directed learners and to connect learned theories with practices. Ideally this space is adjacent to the Makerspace area to allow for projects to be completed from conception, to development, to production of the final project.

**Narrative Description of Educational Activities**

While classroom space is important, more so is the shared community space within the building that support the key shifts in educating students for the future. If the goal of educating students is to provide students with opportunities to build critical thinking skills, develop and encourage their creativity -- to think outside the box and be creative problem solvers, to collaborate with peers, and to be able to effectively communicate with a variety of individuals, then the physical environment in which we instruct and support students must allow for this to occur.

**The New Library Media Center -- The Educational Hub**

The shared/community space or “educational hub” needs to be the heart of the building in which all other teaching and learning surround it. The design of the building must be conducive to academic, social emotional, and physical learning. The educational hub, should be comprised of the school’s library media center that hosts not only print literature, but other materials and supplies to facilitate learning such as computers, video production equipment, other technologies, and various makerspace items. The room should include flexible, comfortable seating and furniture that can easily be moved so as to repurpose the room to fit the needs of the students and/or staff.

Currently, this space is fragmented among various rooms and as a result has put limitations on students due to availability and access to resources. Much of the equipment is either lacking or obsolete, and the current facilities do not promote autonomous learning.

Learning spaces should be designed to support learning that is self-directed, independent, interdependent, authentically personalized and differentiated, learning that is active rather than passive, and student-driven.

**2.12 Unified Arts: Art, Music, Technology, Physical Education and Health (Overview)**

Students participate in unified arts classes four out of five days per week. There is currently no unified arts curriculum offered on Mondays. During the course of a week, each student will participate in a 40-minute art class, a 40-minute music class, a 40-minute technology (computer) class, and a 40-minute physical education and health class. In addition, the Dexter Park Innovation School offers a band class for students who range from the novice to the more advanced student -- these students are scheduled individually to allow for instruction and practice at the building level. Space for this class is often difficult to schedule as they share the space with a common cafeteria, gymnasium, and auditorium space.
On Mondays during the 40 minutes that would typically be a unified arts class, students participate in a passion project where they research and learn more about a topic of their choosing. This project may be done independently, in pairs, small groups, or in a larger group based upon students’ choice. Such activities in the past have included a school garden, a school newspaper, and other hands-on activities.

The new school needs to have the facilities available for students to incorporate the arts into their learning. As Ernest Boyer, President of the Carnegie Foundation stated, “art helps us see connections and brings a more coherent meaning to our world.” Currently, the arts programs at the school are scheduled into art rooms space is available at the time. This means that the facilities these classes are held in often lack the most basic essentials -- such as sinks for art class, soundproofing for band so that academics are not disturbed, and a gymnasium that does not have to function as a lunch room thus limiting its access for students. If “creativity will be the currency of the 21st century,” (Gerald Gordon, Ph.D., President/CEO Fairfax County (Virginia) Economic Development Authority) then we need to provide students with adequate space to develop and grow this creativity.

In addition, the outdoor space of the school should be an extension of the school building, allowing for students to incorporate the outdoors in their learning and by providing the accessibility to nature. The “overall impact of time spent outdoors is clear: better physical health and wellness; increased environmental stewardship; enhanced creativity, concentration, and self-confidence; and stronger collaboration and relationship skills.” (Harvard Graduate School of Education. Shafer, Leah. The Great Outdoors. October 3, 2016.).

A growing number of schools around the world are incorporating Edible Schoolyards, also known as Green Schoolyards into their campuses. Not only do these schoolyards boost academic achievement, they are critical to a child's (and an adult's) physical and emotional health. Incorporating these schoolyards into the curriculum and lives of our students opens the door to a magnitude of experiences which will help our students develop global competencies, Eco literacy, physical fitness, nutrition, creativity, collaboration, independent and interdependent skills. These schoolyards are rich with opportunities to learn the sciences first hand (instead of reading about them in a textbook), as well as opportunities to increase knowledge and understanding in math, language arts, history, geography, and even world languages, the arts and media production. The Living Schoolyards also contribute to curriculum projects related to many social and environmental issues, offering students an opportunity to experience at a young age "making a difference in the world" (http://www.21stcenturyschools.com/living-schoolyards.html).

By incorporating outdoor space as part of the overall school design, more of students’ academic and social emotional needs will be better met.

2.13: VISUAL ARTS PROGRAMS

How the Program is Delivered
As stated above the students participate in the school’s visual art program once weekly for 40 minutes. There is currently a room assigned for the art classes; however, the rooms are outdated and needs additional sink space and storage space for materials. Lighting in the rooms is poor and does not allow for a high quality visual arts program.

**Proposed Changes**

Should the two schools consolidate into a Pre K through grade six school, students will have additional opportunities to access the art room and more importantly the instructor due to the elimination of travel time between buildings. In addition, the restructuring of the art room into a studio facility will allow for students to participate in a rich visual arts program. By incorporating more natural light, modern and varied art equipment and materials, students will have opportunities to support and showcase their learning. By having an art studio with space that can be utilized by core academic teachers, students will be able to integrate art seamlessly into their learning.

However, should the new building services students in grades three through grade six, an upgraded art room that meets the needs stated above will need to be designed and built, the school would continue to utilize the art teacher shared among the district two schools.

While the student population would suggest the need for two art rooms, one designated for primary students and the other designated for upper elementary students, a single art room will suffice due to the fact that currently both the primary grades and the upper elementary students are services by one art teacher. All students in grades kindergarten through grade six receive 40-minutes of art weekly. As illustrated in the chart below:

<table>
<thead>
<tr>
<th>Times</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45 am - 9:15 am</td>
<td>No Art Classes Offered</td>
<td>Grade 3</td>
<td>Grade 3</td>
<td>Grade 3</td>
<td>Available for additional Grade 3 class</td>
</tr>
<tr>
<td>9:20 am - 10:00 am</td>
<td>No Art Classes Offered</td>
<td>Grade 4</td>
<td>Grade 4</td>
<td>Grade 4</td>
<td>Available for additional Grade 4 class</td>
</tr>
<tr>
<td>10:05 am - 10:45 am</td>
<td>No Art Classes Offered</td>
<td>Grade 5</td>
<td>Grade 5</td>
<td>Grade 5</td>
<td>Available for additional Grade 5 class</td>
</tr>
<tr>
<td>10:50 am - 11:30 am</td>
<td>No Art Classes Offered</td>
<td>Grade 6</td>
<td>Grade 6</td>
<td>Grade 6</td>
<td>Available for additional Grade 6 class</td>
</tr>
</tbody>
</table>
The district is proposing the space allocated for an additional art room be utilized as a family resource center to provide wrap around services to students and their families. As previously mentioned under the “Student Guidance and Support” section of this document, the availability of a Family Resource Center will allow for more effective outreach to parents and the community and ensure a fluid delivery of school/home services for students and families that will result in greater student academic proficiency and social emotional learning.

2.14: MUSIC/PERFORMING ARTS PROGRAMS

How the Program is Delivered

As with the visual art classes, students participate in a music program weekly for 40-minutes. Since there is no dedicated music space, classes occur wherever space is available and change depending upon the school’s schedule. Sometimes, the music classes occur in the cafeteria but other times they occur elsewhere if that area is being utilized.

The school is currently in the process of building an elementary band and space for practice and storage is problematic and can infringe on other students’ academics due to the location of the practice area(s) and the proximity to classrooms.

Proposed Changes

The new music/performing arts program would require adequate space and acoustics that allow for both practices and performance. In addition, the program would require substantial
storage space for instruments and materials. A cafetorium that can be divided off so that practice can occur during scheduled lunch times would be ideal. In addition, the presence of a stage and changing facilities off the back of the stage with bathroom facilities would allow the school to expand its current music program into a performing arts program.

2.15: PHYSICAL EDUCATION PROGRAMS

How the Program is Delivered

Students participate in PE/health weekly for 40 minutes. The physical education teacher is shared among the two buildings and has adequate space at the primary school however, limited space at the upper elementary, the Dexter Park Innovation School as the gymnasium also serves as the cafetorium. Between the two campuses, there is a field for outdoor use; however, the field is not level and is situated on a hill. This layout does not promote the use of the field for organized games and sports; and is often a safety issue, especially for the younger students.

Proposed Changes

Regardless of the new school building servicing students in Pre K through grade six or for students in grades three through grade six, the proposed changes would be for a large gymnasium with adequate storage of materials and with bleachers that can be folded back to store against the wall when not in use. In addition, outdoor fields need to be adequate in size for use of various sports and be able to be utilized by both the school and the community. The gymnasium should be a single function facility. Also, the facility should be located apart from the core academic classrooms so that it can be utilized by the public when school is not in session.

Since the physical education teacher is currently shared between the primary school and the upper elementary school the scheduling of classes is complex. By not being able to access the current space as a gymnasium during the middle of the day (lunch time) many of the physical education classes occur outside. This however becomes impacted by inclement weather. The new space will need to be able to be accessed for classes throughout the day and have adequate storage facilities for supplies and equipment, also having adequate storage for materials for use for before and after school programming. While the school does not currently have before school programming and has limited after school programming (such as Girls on the Run) the facility needs to be able to utilize the space for such programming and for possible expansions of programming outside of the school day. In addition, lavatories, changing facilities, and water fountains need to be located adjacent to the gymnasium; this will make use of the gymnasium by after school groups and community groups viable outside of regular school hours and limit public access to the rest of the building for safety and security. The goal of this space to provide a space for educating students and the greater community on the importance of a healthy lifestyle and the need for movement and exercise in maintaining a healthy mind/body. Research has shown that the more physically active and healthy students
are the greater their academic performance and social emotional wellbeing. The gymnasium should be able to service the youngest to the oldest learners in the building and the community.

2.16: SPECIAL EDUCATION PROGRAMS

Students currently receive special education, Title I, and ELL services using a push-in model. Some related services such as OT, PT, and speech will use a pull-out model and alternate their designated times so that students are not consistently missing a specific subject. Currently the schools service students who receive a variety of services and who participate in a variety of programming such as: special education services, 504 plans, and a variety of physical and mental health services such as occupational therapy (OT), physical therapy (PT), speech services, counseling services provided by both in house staff and community service providers, and general and specialized health services.

- Current SPED Programs and Number of Students in Each (chart)

<table>
<thead>
<tr>
<th>Grade Level</th>
<th># IEPs</th>
<th># ILC Students</th>
<th># TLC Students</th>
<th># SSC Students</th>
<th># Students w/1:1 Para Educators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K</td>
<td>21</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>17</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Grade One</td>
<td>25</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2 plus 2 students w/2:1 para</td>
</tr>
<tr>
<td>Grade Two</td>
<td>22</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Grade Three</td>
<td>24</td>
<td>0</td>
<td>3</td>
<td></td>
<td>1 and 2 students 2:1</td>
</tr>
<tr>
<td>Grade Four</td>
<td>19</td>
<td>0</td>
<td>2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Grade Five</td>
<td>26</td>
<td>0</td>
<td>2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Grade Six</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

- Proposed Programs/Service Needs (for Pre K -6 and for 3 - 6)

There are no proposed changes to programs/services needs for either a Pre K through grade six school or for a grade three through grade six school.

- Programs that will be Added or Enhanced (for Pre K - 6 and for 3 - 6)

There are no proposed additions or enhancements to programs/services needs for either a Pre K through grade six school or for a grade three through grade six school.
Space for Related Service Providers

The Orange Elementary Schools currently implements an inclusionary model for special education services. Wherever possible, students who receive special education services receive them in the general education classroom. At each grade level there is at least one classroom, sometimes two, that are team taught with a general educator and a special education educator. These teachers work in concert with each other to deliver curriculum to the students. The only time that services are delivered outside of the general education classroom would be if such services would be disruptive to the class as a whole, not physically able to happen in the classroom -- i.e. large gross motor activities for PT, or infringe of the student who receives services right to privacy -- i.e. counseling services.

- Therapeutic Learning Center: The Therapeutic Learning Center (TLC) program is designed to meet the needs of students in Pre-K to sixth grade who require a high level of supervision and support to not only access the curriculum, but also to ensure that physical, sensory, and safety needs are addressed. Students in this program require discrete trial intervention within a substantially separate setting and most students utilize augmentative communication devices (AAC) in order to communicate. These devices are both high and low tech and support language skills for students who are non-verbal or are just beginning to develop verbal language skills. Students typically receive related services in the areas of speech, assistive technology, occupational therapy, and physical therapy. Students in the TLC are integrated into the general education setting to the maximum extent possible. The three major components of the program include social pragmatic, sensory integration, and the systematic teaching of skills using Applied Behavior Analysis. The program is overseen by one special education teacher at each building who work in tandem with several paraprofessionals. Currently all student in this program at Fisher Hill have needs that require an identified adult to support them throughout the day with the exception of two students, who share a paraprofessional. The Dexter Park program has an added emphasis on academic, vocational, and life skills. Some students require an identified adult, whereas others in this program are working independently.

- Student Support Center (SSC)

The school does offer some programming that is more supportive to students needs and reduces the amount of time students spend in the general education classes based on a student’s needs. Such programming includes an ILC and TLC classroom for students who require a smaller setting, more supportive structures, and modified curriculum in order to meet their education and social emotional needs. These programs are staffed by highly qualified and trained educators and para educators. As with all special education services the goal is to move to a more inclusionary model for all students as the need for specific supports diminish.
• Related Services: Speech Therapy, Occupational Therapy, Physical Therapy, and Counseling Services

A broad range of related services are currently offered at the Orange Elementary Schools. These services range from speech therapy, physical therapy, Occupational Therapy, and Assistive Technology. The percentage of students in the school requiring such services range in number; however, are aligned with the national statistics listed below from The National Center for Educational Statistics in figure 1.

Figure 1. Percentage distribution of students ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by disability type: School year 2015–16


Providing such services in a building designed in the last century is problematic. For example, classrooms are being used to deliver specialized OT/PT services in an environment that is not conducive to optimal service delivery. Office spaces have been utilized for counseling services and sometimes function as “cool rooms” for students who require a quiet space to regroup and refocus. As a result of this, general classroom space has been reduced resulting in larger class sizes. Students who require specialized services individually or in small groups are often pulled into hallways or alcoves for instruction and therapies to be delivered. This is not ideal and often does not allow for the privacy necessary. The new school building design team will need to consider such student needs and services when planning the new school building.

According to the latest statistics, 1 in 5 children ages 13-18 have, or will have a serious mental illness and for children aged 8-15 the estimate is 13%; and according to the CDC, “1 out of 7 U.S. children aged 2 to 8 years had a diagnosed mental, behavioral, or developmental disorder (MBDD)”.

The impact of these numbers has resulted in an increased demand for service to be provided during the school day.
This data has had a huge impact on the decision of the committee in the allotting of grade level classrooms, with the thought being by keeping the primary classrooms Pre K through grade two at four classrooms with class size capped at 20 students, that many of the behavioral issues can be addressed and supports put in place for early intervention of students social emotional needs.

Unfortunately, the current configuration of the school limits the easy access for service delivery. Often there is just not the space for the delivery of services, resulting in other individuals being displaced in order for services to be rendered. Regardless of grade configuration, the new school building will need to take into account the need for such services and as a result have a suite dedicated to therapies and such services for not only personnel but for local agencies (CHD, CSO, etc.)

- https://www.cdc.gov/childrensmentalhealth/data.html

Nursing/Medical Needs

In addition to related services and the social emotional needs of students, there are many students in school today with such common chronic health issues such as: asthma, epilepsy, diabetes, and food allergies. These along with other medical issues of a more pervasive nature require the presence of a highly qualified nurse and/or medical staff. Some students in school are accompanied by 1:1 staffing who assist with their daily needs such as a para educator while other students require the presence of a 1:1 nurse. Due to the nature of the physical needs of these students, additional lavatory space and changing space is often required. The present school which was built in the late 1900’s was not built with the thought or need to provide for students with these types of disabilities. The new building will need to reflect and account for the medical and emotional needs of such students in an environment that is adaptive and welcoming and not spaces such as converted storage facilities or reconfigured offices. A medical suite that offers student and family confidentiality is a must.

It is highly desirable and necessary for a Family/Community Resource Center to be included that would be located near the entrance of the building and that could be locked-off from general classroom space. Given the diverse needs of the student population, the need to provide wrap-around services is crucial for the success of our students. In addition, the availability of a Family/Community Resource Center aligns directly with the district’s guiding principle of promoting a positive school climate and culture; by being better able to address students’ social emotional needs and form strong partnerships between home and school, the school will be better able to help all students reach their full potential and academic proficiency.
2.17: VOCATIONAL AND TECHNOLOGY PROGRAMS - MakerSpace/STEM

The schools are encouraging students to become curious, autonomous learners; to understand that failure is just a stepping stone to success, and that students should fail often and fail early, in order to build resilience and grit. Much like vocational schools (Chapter 76), the schools are encouraging students to apply their learning in practical and imaginary ways, to become apprentice learners, to discover new uses and to repurpose existing materials and technologies in new and innovative ways. This process is often messy, non-linear, and collaborative in nature. In order to facilitate this style and type of learning, the school, regardless if it is a Pre K through grade 6 or a grade three through grade six school, needs a dedicated MakerSpace/STEM for students that can be utilized by large groups of students, small groups of students, and individual students. While this space needs to provide for learning that is often noisy and loud, the space also needs to allow for such learning to be visible to the school community. The MakerSpace much like the library hub needs to be the heart of the school, where such learning is visible and embraced by all; as such both areas should be located near one another.

The MakerSpace would need to have adequate space, light, technology, electrical, sinks, and storage. The space would need to be flexible and easily converted into various configurations to meet the needs of students and their projects. In addition, the MakerSpace needs to be accessible to students outside of regular school hours and have a dedicated staff member to oversee the room, use of materials, and storage. The current plan is for the technology to utilize this space for classes.

The goal of the MakerSpace is to provide an area within the school that is assessable that allows students to develop and design projects that illustrate their learning. The tools required in this area will be from the very basics of paper and glue, to hand tools, to technologies such as 3D printers and computer hardware and software. This space will not have designated staffing but rather be open to all educators and students to use. Educators will schedule time in the area (this will be done via administration or his/her designee) and students will utilize the area.
during designated open times – these open time will need to be staffed for general supervision of students and for support (per administration). However, the main purpose of the space if for students to independently research and design their projects. Ideally this space would be adjacent to the library/media center so that students would have easy access to materials from research and design (library/media center) to the actual construction of projects in the MakerSpace.

### 2.18: SAMPLE STUDENT SCHEDULE

Each PreK class is staffed by a licensed Early Childhood teacher and has a paraprofessional assigned to the room. Additional paraprofessionals may be present if a child has a 1:1 paraprofessional indicated in his/her IEP. While the preschool has been reduced due to budgetary constraints, it is the goal of the district to offer a full-day 4-year old program in the future should Federal or State funding becomes available.

#### Pre-Kindergarten

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time</td>
<td>AM Session M-F</td>
<td>AM Session M-F</td>
<td>AM Session M-F</td>
<td>AM Session M-F</td>
<td>AM Session M-F</td>
</tr>
<tr>
<td>Four-Year Old Program</td>
<td>PM Session M-F</td>
<td>PM Session M-F</td>
<td>PM Session M-F</td>
<td>PM Session M-F</td>
<td>PM Session M-F</td>
</tr>
<tr>
<td>Break Between</td>
<td>Teacher PLC</td>
<td>Teacher PLC</td>
<td>Teacher PLC</td>
<td>Teacher PLC</td>
<td>Teacher PLC</td>
</tr>
<tr>
<td>Sessions</td>
<td>Teacher Prep</td>
<td>Teacher Prep</td>
<td>Teacher Prep</td>
<td>Teacher Prep</td>
<td>Teacher Prep</td>
</tr>
<tr>
<td></td>
<td>Teacher Lunch</td>
<td>Teacher Lunch</td>
<td>Teacher Lunch</td>
<td>Teacher Lunch</td>
<td>Teacher Lunch</td>
</tr>
<tr>
<td>Half Time</td>
<td>AM Session M, W</td>
<td>AM Session M, W</td>
<td>AM Session M, W</td>
<td>AM Session M, W</td>
<td>AM Session M, W</td>
</tr>
<tr>
<td>Three-Year Old Program</td>
<td>T, TH</td>
<td>T, TH</td>
<td>T, TH</td>
<td>T, TH</td>
<td>T, TH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As with the Pre K classes, all kindergarten classes are staffed by a licensed Early Childhood teacher and has a paraprofessional assigned to the room. Additional paraprofessionals may be present if a child has a 1:1 paraprofessional indicated in his/her IEP. However, unlike the Pre K classrooms, the kindergarten offers a full-day program for all students.
Kindergarten

<table>
<thead>
<tr>
<th>TIME</th>
<th>KINDERGARTEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:10 - 8:45</td>
<td>Breakfast in the Classroom/morning meeting</td>
</tr>
<tr>
<td>8:45 - 9:15</td>
<td>Morning Work (thematic based)</td>
</tr>
<tr>
<td>9:15 - 9:45</td>
<td>Fundations/Title 1/Reading Groups</td>
</tr>
<tr>
<td>9:45 - 10:00</td>
<td>Story</td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>Centers (play based)</td>
</tr>
<tr>
<td>10:30 - 10:45</td>
<td>Movement Break</td>
</tr>
<tr>
<td>10:45-11:30</td>
<td>recess/ready for lunch</td>
</tr>
<tr>
<td>11:30 - 12:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:00 - 12:30</td>
<td>Read Aloud</td>
</tr>
<tr>
<td>12:30 - 1:10</td>
<td>Specials: Art, Music, PD/Health, Computers, etc.</td>
</tr>
<tr>
<td>1:10 - 1:30</td>
<td>Snack</td>
</tr>
<tr>
<td>1:30 - 2:00</td>
<td>Math/writing block</td>
</tr>
<tr>
<td>2:00 - 2:30</td>
<td>Academic Choice (centers)</td>
</tr>
<tr>
<td>2:30-2:45</td>
<td>Clean up/closing circle</td>
</tr>
</tbody>
</table>

Currently students in grades 1 through grade 6 (preschool/kindergarten schedule listed further below) follow a typical schedule such as the one listed below for the typical school days that is from 8:25 am - 2:55 pm. There is a 5-minute transition time build it for arrival, dismissal, and lunch/recess. This schedule is applicable to both a Pre K through grade six school and a grade three through grade six school.

**Grades 1 – 6**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
<td>35 minutes Breakfast in the Classroom</td>
</tr>
<tr>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
<td>Morning Meeting</td>
</tr>
<tr>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
<td>90 minutes Readers Workshop</td>
</tr>
<tr>
<td>40 minutes Passion Project</td>
<td>40 minutes Art</td>
<td>40 minutes Music</td>
<td>40 minutes PE/Health</td>
<td>40 minutes Computers</td>
</tr>
</tbody>
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Currently the bussing pickup and drop off at the Orange Elementary Schools is lengthy and cumbersome. The pick-up and drop-off site is right outside the main entrance and dangerously close to the playground area. The new school will need to take into account a school bus drop-off and pick-up site away from the main entrance of the building and placed adequately and safety away from immediate access to the playground to prevent students from darting in front and behind the school bus in order to access the playground area.

In addition, parent drop-off and pick-up needs to be located in a separate area from the school bus drop-off and pick-up, and away from students who walk to and from school to ensure that arrival and dismissal times are not congested and remain safe for all students, parents, faculty, and visitors.

Educator and employee parking also remains an issue at the school. There is currently not enough space to accommodate all the individuals who work within the school. Just as the school demographics have changed and the school is educating a more diverse population than ever before, so has the staffing patterns changed. Part-time and consulting staff (such as OT, PT, speech, therapist, etc.) often find it difficult to find adequate parking at the school and as a result, end up parking in the bus pickup and drop-off areas or too near playground facilities or in designated fire lanes, thus allowing for potentially dangerous situations to occur.

### 2.20: FUNCTIONAL & SPATIAL RELATIONSHIPS

The location of rooms and services are highly dependent on the new school that will be built. A comprehensive elementary school that has students from Pre K through grade six will need to have a different layout than a school that houses upper elementary students.

For optimal delivery of services, a Pre K through grade six school, would have the primary grades located closest to the main office, the nursing suite, and primary playground facilities. As Pre K runs on a half-day schedule and transportation is not provided, the location
Tab 4
Orange Elementary Schools
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of the Pre K classrooms near the entrance of the building will limit the number of adults within the building during pick-up and drop-off times. In addition, the location of a Family/Community Resource Center near the entrance will allow for early parent education and care for our youngest students.

Older students, in grades three through six school, would benefit being closer to STE classrooms, the media center for research, and away from a playground area that may prove to be distracting when other students are outside. In addition, since most students at this age enter and exit the building independently, it is not crucial that their classes be located near the main entrance and it is actually preferable that classrooms are separate from the public areas for safety and security.

In addition, working in conjunction with the design team the committee has determined that additional classroom space be available to address variation in student population and the possible expansion of preschool programming. By allocation an additional room for potential preschool expansion and two additional classrooms in the building to allow for student population expansion, the team has developed a plan for the building that will allow for appropriate use for decades to come and to be ready for any and all technological, educational, or social emotional learning/service changes in the future.

Playground Facilities and Field Space for Organized Sports

In addition to dedicated outdoor learning space, the school needs to have adequate playground and sports fields available for student use. Research has repeatedly shown the positive benefits of recess for elementary students, the American Academy of Pediatrics states that “role of recess in school cited four critical benefits of recess: (1) greater levels of physical activity and fitness, (2) improved attentiveness in class, (3) improved cognition and learning, and (4) practice of peer-to-peer social and emotional skills.”

https://www.aft.org/ae/spring2017/ramstetter_and_murray

Given the physical and emotional needs of students, recess is an important and necessary component of the school day. Currently, recess abuts the students’ lunch period; after lunch students have a 30-minute period in which to socialize and participate in physical activities. Unfortunately, the playground equipment which the students utilize at this time is grossly inappropriate in terms of size and amount to reflect the current needs of the student body. In addition, none of the playground equipment is designed to meet the needs of students with disabilities.

By ensuring that appropriate playground equipment, sports areas, and free field space are available at the school, not only will all students benefit from this space during the school day and during scheduled before and after school events, but the community and its children will
benefit from the use of the facilities from little league sports and organized games, to personal use of the playground equipment by local families. Should the school service students in Pre K through grade six and not just students in grades three through grade six, additional playground equipment designed for early childhood students would need to be available and separate from the playground equipment for older elementary students.

In addition to the general fields and playground area, the new school should take into consideration outdoor education. The goal of the outdoor educational space is for students to experience learning beyond the classroom walls. By accessing the local flora and fauna of the school campus, students will be able to make concrete learning they have been exposed to in the classroom. Use of wooded trails and outdoor gardens provide students with real life experiences of the life cycle of plants and small animals such as birds and insects. Observances of wildlife at the adjacent pond also provides students with the opportunity to view the impact wildlife has on the local ecology and environment.

**Maintenance, Shipping and Receiving, and Storage Facilities**

Maintenance facilities and storage will also need to be upgraded to reflect 21st century needs. With the ever developing technology needs, storage facilities will need to be climate controlled and have appropriate security features and inventory features to ensure all items are appropriately stored and tracked (including dietary and the kitchen facilities). The tracking system needs to be mobile and digital allowing for easy access and maintenance of the facility.

**2.21: SECURITY & VISUAL ACCESS**

The building committee expressed a preference for a double entry system for the building with all visitors entering through the main entrance. While bus students would enter through a separate entrance to ensure that traffic flow and safety issues were adequately address, the committee felt by having one entrance, it would allow for better control of visitors to the building. The committee favored having conference rooms, a Family/Community Resource Center, and bathrooms available in this common area.

It was also felt that preschool classrooms should be located as close to the main entrance as possible, while still being able to be secured from the common areas as preschool has additional drop-off and pickup times and many more preschool students arrive via parental transportation than by bus.

In addition, it would be favorable to have common spaces, such as a Family/Community Resource Center, that would be accessible to the community to be separate from the general classrooms to better ensure student safety. Security cameras both inside and outside common areas of the building and in parking lots would also allow for better monitoring of the building.
Since common areas used by the public would be separate from general classrooms, transparency is important and there should be large windows from classrooms to hallways and small meeting areas for students so that educators would have a visible line for monitoring. In addition, by making learning visible, teachers are no longer in silos of learning; there is a common purpose and agency among staff and students. High quality learning and instruction is the norm and visible to all.

2.22: EDUCATIONAL PROGRAM CONCLUSION

The new Orange Elementary School will need to be a structure that is easily adaptable to the changes that will occur in the next few years and also the next few decades. As the needs of the community and the students change, so will the building need to be able to adapt and to do so easily and readily; the consideration of this fact will entail being sure the building has adequate space, lavatory, and outdoor areas and equipment for its youngest learners and it’s oldest learners. The facility should be able to meet the needs of the National Association for the Education of Young Children (NAYEC) accreditation should the need exist in the future. https://www.naeyc.org/accreditation and also meet the need of young adolescents.

By planning for the academic, physical, social, and emotional needs of students and families in Orange, MA and by anticipating demographic changes in the school and community, the new school building will be able to meet the growing and ever changing needs of not only the children but the community in general so that they are truly educating students who are #readyfortomorrow. As the Orange Elementary Schools so proudly states they are there for every child, every day, and a new school building needs to allow educators to meet that promise. https://www.orange-elem.org/

*Additional staff and student feedback can be found here.