IPS Elementary Educational Plan

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Overview and Objectives

The Ipswich Public School District has a rigorous plan in place for the implementation and alignment of 21st Century Learning. Through the District's Successful Habits of Mind, Powerful Learning and STEAM work, Ipswich Public Schools strives to create and foster a learning environment that prepares all our students to be successful in their future college and career endeavors.

Ipswich Public Schools have identified the following six Successful Habits of Mind. These Successful Habits of Mind are the District's 21st Century learning expectations, and are embedded in curriculum and instruction:

- 1. PERSEVERANCE: With perseverance we persist through challenges, manage pressure and maintain an optimistic outlook.
- 2. COLLABORATION: Through collaboration we demonstrate mutual respect and shared responsibility as we work with others to accomplish a task and achieve shared goals.
- 3. CRITICAL THINKING: Through critical thinking we reason abstractly, concretely, quantitatively, and resourcefully for a purpose.
- 4. CREATIVITY: With creativity we imagine and explore possibilities, challenge existing structures and develop novel thoughts and forms of expression.
- 5. SELF-MANAGEMENT: With self-management we take responsibility for our own behavior and success by setting goals, organizing our resources and revising our strategies based on self-reflection.
- 6. COMMUNICATION: Through communication we exchange ideas using a variety of formats while considering the audience.

Through the integration of these Habits, Ipswich Public Schools supports students in developing the skills they will need to be successful in our rapidly changing world.

By integrating Powerful Learning tenets into curriculum and instruction across the District, IPS works to ensure high student achievement in rigorous, vibrant and joyful learning environments. IPS has developed the following descriptors of Powerful Learning for its students:

- engaging in meaningful, authentic, and challenging tasks.
- thinking deeply, taking risks, and demonstrating.
- being supported in an environment that fosters confidence and competence.
- taking ownership of their learning, making appropriate choices, and engaging in self-reflection.
- working independently or with peers as valuable members of the learning community.

There are several instructional mediums Ipswich Public Schools Department invests in in order to bring our 21st Century Vision to fruition. Ipswich is committed to taking an integrated approach to education by focusing on STEAM (Science, Technology, Engineering, Arts and Mathematics) in our Kindergarten through Grade 12 education program. Project-based Learning is central to the district's instructional approach where students work with the teacher, other adults and each other to solve real world problems. Ipswich Public Schools District uses a local commitment to build a Sustainable Community as a platform for elementary education. This commitment to sustainability has created lasting partnerships between the schools and local organizations. Finally, education in Ipswich reflects a commitment to all students accessing a rigorous curriculum. A co-teaching model that pairs a regular education teacher with a special education teacher supports all students in the classroom. These and other instructional strategies create a learning environment that builds strong content knowledge and Habits of Mind in a Powerful Learning environment.

"STEAM" is the avenue in which the Habits and Powerful Learning align with content in Ipswich Public Schools. This integrated approach to learning demands instructional space that supports students engaged in Design Thinking hands-on, minds-on projects. Our work with local STEAM businesses has created partnerships that are mutually beneficial. Students need space to construct a water filtration system, build a rain-making machine or assemble a musical instrument out of household items. These instructional spaces must accommodate Maker Spaces where students can think, wonder and create, using eclectic materials. Instructional space must support small group work, individual learning and rich inclusive collaboration. The space within and without the school building should be seamless to support an active and fluid learning environment.

Ipswich Public Schools envisions our new building enhancing the District's commitment to Project-Based Learning in our instructional spaces. Project Based Learning enables our students to build knowledge and skills by working on extended projects that require investigation into complex problems. This is another area where collaborative relationships with the community help bring interesting projects to fruition. These projects include student active investigation seamlessly using technology in a constructivist setting. Dynamic space for building/creating, researching and collaborating on real-world problems is essential to the success of a Project-Based Learning school. Projects need space for creation, presentation and display.

Sustainability education is a perfect medium for the real-world problem solving that the Ipswich Public School District is committed to integrating into our children's education. Learning space within the classroom and expanded to the outdoors will help support the projects associated with sustainable education. Our current Farm to School initiative, a joint effort between the school and local citizens, has created gardens at each district school. Students need easy access to the outdoors to tend self-created vegetable gardens, analyze local vernal pools and explore the local ecosystem. Classrooms and common spaces must have the flexibility for

eager students to analyze, construct, discuss and monitor sustainable projects. The school building can also be an active learning tool with transparent spaces committed to sustainability. From planting and water filtration design to food preparation and nutrition, the gardens are an active learning lab for inquiry. The cafeteria can support recycling and reusing; the boiler system can reflect high efficiency; the roof can house solar panels; and, the walls and floors can be made of recycled materials. All these building systems can be used as learning opportunities for sustainable-minded students and teachers.

Over the past few years, the Ipswich Public School District has allocated/re-allocated significant funding to support a co-teaching model. The collaborative effort between professionals creates a dynamic adult learning environment. Our co-teaching model creates a classroom experience for students where a regular education teacher and a special education teacher share lesson planning, instruction and assessment responsibilities. This collaborative approach to supporting all students enables each student in the class to access a challenging curriculum. The co-teaching approach demands additional space to fully realize the model's potential. Two teachers, facilitating several differentiated small student groups, will be problematic in an average sized classroom.

Over the past three years, the Ipswich Public School District has devoted time and resources to developing internal professional capacity for high level collaboration. Teacher leader positions were created in Professional Learning Community facilitation, curriculum development and instructional technology integration. Over seventy teachers district-wide are trained as leaders in the these areas to help facilitate highly effective professional collaboration. This commitment to collaboration extends to the student and parent community. Our new facility must support internal professional collaboration with the space for teachers to meet and work together to build a world-class school system for our students. Additionally, high quality space is needed to work and meet with parents in a private and secure area. Effective collaboration is at the center of our work and must be supported by the appropriate space.

The Ipswich Public School District is on a dynamic journey to create an effective learning environment, designed to prepare our students for success in this century. Our new building must support hands-on, minds-on, project-based learning. Technology should be accessed by students and professionals in a seamless way. Instructional space must be flexible enough that in the future it can meld to support new instructional strategies and student groupings. Building walls should be permeable to give access to a rich outdoor learning environment.

Grade and School Configuration

Recently, the Ipswich School Committee, acting on input from the community, decided to maintain the PreK-5 grade configuration that has existed in the District for many years. In numerous open meetings, the community, especially elementary school parents, expressed

strong support for our current elementary school grade configuration. Parents want to ensure that the strong neighborhood school culture, that exists in our current elementary experience, is preserved in the new school building. Parents appreciate the powerful relationships that are built over time while their children traverse through their elementary school experience. Student grouping will have to be thoughtfully constructed to ensure relationship continuity and strength.

The school configuration question will continue to be analyzed as the school building project progresses. The objective is to have the new building support the strong elementary school culture parents have come to expect. The school configuration must support the nurturing learning environment which has become the hallmark of our elementary schools without restricting our ability to innovate as education changes.

Class Size Policies

On average, class size in grades K-5 is 22, with three sections at each grade level. Pre-school classes are full day with age groups alternating days in the week. The average pre-school class consists of 15 students. Class configurations reflect our inclusionary model of instruction. Like many elementary classrooms, students in grades K-4 remain under the tutelage of the same general education teacher(s) throughout the day; although combined grade level instruction, meetings and events are frequent. Fifth grade students share discipline-specific teachers, moving to different classrooms throughout the day. Music, physical education and art instruction is part of each child's instructional program; however, the amount of instruction varies by grade level and discipline.

Many classrooms include two adults. Over the last three years, there has been a strategic approach to creating co-taught classrooms, moving from paraprofessional use to general education/special education teaching partners.

Co-teaching comes in many forms: "One Teach, One Observe," "One Teach, One Assist," alternating teaching, parallel teaching team teaching and station teaching. This allows for a fluidity of co-teaching methods for Special Education teacher and regular education teacher in the classroom to best support their students' needs. At Winthrop School, students experience forms of co-teaching when classes are combined for a common experience and teaching is fluidly presented by multiple teachers. This model is also evidenced when academic workshop blocks are structured with Title I teachers and/or Special Education teachers, teaching and rotating small groups for instruction. At both Winthrop and Doyon, students experience co-teaching in the form of students receiving instruction from the classroom teacher, supported by teaching assistants or other support personnel.

During the 2015-2016 school year, general education/special education pairs can be found in multiple classrooms. The special education teacher shares the daily instruction with the

regular education teacher. As a strategies specialist, the special education teacher's skilled and consistent involvement benefits all students in a grade level. Co-teaching keeps the highest skilled professionals actively engaged with all students. This type of co-teaching is another model of the student support services available. In the coming years, the District will continue to move towards a full co-teaching model. This necessitates the need for elementary classrooms to accommodate two teachers, their materials and their belongings along with flexible classroom instruction areas.

Small group instruction and personalized learning is not only a priority, but it is also a professional agreement in our culture. As the co-teaching model emphasizes, supporting students at the point of instruction and differentiating instruction to meet individual student needs occurs constantly throughout the day. Math and Reading Specialists, the English Language Learner Teacher, and even therapists such as Certified Occupational Therapy Assistants and Speech and Language Pathologists often work within the context of the classroom, instructing a small group of students on grade level and personalized learning objectives. Classrooms are equipped with group flexibility in mind. Whenever possible, remedial and special education instruction on individualized educational goals occurs inclusively. For instruction that must occur outside of the classroom, small group instructional spaces are used. Currently, these spaces are inadequate, overcrowded and undersized; however, the goal for the future is to develop these spaces in close proximity to classrooms. Fully equipping these spaces with instructional materials and technology is a requirement.

School Scheduling Method

Scheduling, the challenge for any school, is driven by several factors. First and foremost, all attempts are made to allow grade level teams of teachers, including any support staff, to meet regularly in consultation on students and curriculum. Since elementary schools rely on specialists' classes to provide this meeting time, a grade-specific specialist block is ideal. Specialists, in turn, are scheduled to allow for a team meeting time of their own.

Challenges arise in a variety of forms. Limited space options (i.e., cafeteria use), shared building staff (i.e., instrumental music teachers and physical education teacher), differing requirements of time in specialists' classes (i.e., thirty minute kindergarten blocks versus forty-five minute specialist blocks for older students) and varied offerings (chorus and instrumental instruction for intermediate grades) mandate variations in daily/weekly schedules.

Lunches are scheduled to include a recess and currently are scheduled in thirty minute blocks for students in grades 1-5. This rotating schedule continues for two hours. Specifically, seven potential 45 minute blocks are available, but restrictions exist due to the current limited lunch seating. Recess precedes lunch for grades 1-5 with the first lunch seating at 11:15 am. Students have 15 minutes to eat, well under the current recommendations for meal times. As

one grade level exits, another grade level enters, causing considerable congestion and restrictions in our ability to consistently compost and recycle, programs that are important to our sustainability-minded community. Kindergarten and preschool children are scheduled in the cafeteria for a full thirty minutes to allow for constant supervision, required by national accreditation, and to minimize noise for our youngest learners. Lunches conclude at 1:00 pm.

At Winthrop, the student-run school store occupies the stage one day per month for the entirety of the lunch period. Transfer patterns are highly restrictive during these times since exiting grade levels generally line up and exit out the stage doors.

Ideally, scheduling in a new building would be driven primarily by educational goals, ie., team meetings and student collaboration, rather than building restrictions. With proper acoustics and space, the number of lunch rotations could be reduced. Safety and supervision concerns for our youngest learners should be considered in deciding when, where and with whom they eat lunch.

Classroom Instruction -- Pre-Kindergarten

The focus of preschool is and should always be learning through play. Children learn about the world and life through various play situations. In a preschool setting, they need a space that can foster play across a variety of realms including science, math, literacy, art and music. The space needs to be accessible to young children so that learning can be student-driven with adult facilitation. This means low tables, stable chairs, bathroom access in the room, multiple sinks that are low enough for young children and a variety of organization units that are child friendly, but can be moved around when necessary to accommodate a new classroom set-up when needed. Flexible walls and furniture are a must.

Preschool classrooms should have easy access to the outdoors and have tools and resources readily available to be used for play and exploration. Young children need space to move around and also a place to relax when school gets overwhelming. They learn through their senses and love to touch everything. The ideal situation would be adjacent preschool classrooms that enable classes to work together at times. In addition, preschoolers benefit from having easy access to the older students in the building as well so that they can continue to have "buddy" activities. Ample square footage would allow the classrooms to be organized into various play areas so that students can explore and learn independently. In an effort to build persistence and support interests, it is ideal if projects can be left for several days without disruption and/or clean-up..

Classroom Instruction -- Primary (K-2)

Long-lasting, positive impressions of formal schooling are made in the earliest years of one's life. Similarly, parents form persistent opinions, based on initial interactions with a school community. Our early childhood programs, comprised of our three and four year old integrated preschool and our nationally-accredited kindergartens, embody the "positive feelings" responsibility. Designed for active, play-based and project-based thematic learning. our early childhood programming seeks to grow the child as well as to inform the parent. Center-based instruction ensures active student engagement, blended with small group play-based instruction. Frequent gross and fine motor practice intertwined with social and academic skills means that our classrooms are filled with learning, laughter and friendships. Moveable, flexible spaces with easy to clean surfaces, numerous adjacent bathrooms and storage space complement outdoor learning spaces that foster observations of the child's world. Technology, in limited use, reinforces, motivates and expands the opportunities for direct observation and exposure. Future, updated programming would require two-way mirrors for observation in selected learning spaces, adjoining parent/teacher community space for family resources, parent nursing, student assessment and/or special education-related services.

The key word is accessibility, in both pedagogy and philosophy, as well as in the physical design of the building. Educators envision their students accessing curriculum in increasingly independent ways. We believe that students learn best when environments provide information in a way to promote children to construct knowledge. Students should be able to design and lead projects, interact with community in relevant ways, work collaboratively with peers and engage in backyard science by studying the immediate natural environment outside their school and greater community.

Elementary school students and teachers need access to real materials; they need tools for learning, as opposed to textbooks. They need storage for those materials. Students will need their own personal storage space to promote more independence. Learning spaces must be flexible, with moveable walls that help create spaces and furniture that is functional for a variety of purposes. All classes should have access to the outdoors and an outdoor classroom setting that has weatherproof storage. Project spaces within the classroom will be crucial in order to promote a fully integrated STEAM approach.

Supervision of our most vulnerable students is always of concern. The balance between promoting independence and continuous supervision is a difficult one to maintain. Areas must be both accessible and with unrestricted views.

Classroom Instruction -- Intermediate (Grade 3-5)

Academic rigor is an essential component of a robust curriculum that is appropriately challenging, includes quality instruction to stretch students' minds, and utilizes authentic

assessments to monitor and measure students' progress. A rigorous academic environment is not only a learning community for students but also for teachers. Both are encouraged to be risk-takers, active thinkers, and doers. This environment creates lifelong learners, who are capable of independent reflection, self-evaluation, and reasoning. Ultimately, academic rigor produces learners who demonstrate mastery of challenging and complex concepts; they show initiative and ownership of their own learning; they can critically think and problem-solve; they have the capacity to collaborate and lead; and, they possess agility and adaptability.

As such, we envision that academic rigor in the future will necessitate a flexibility of learning environments. We imagine being paper-free and, in this, that technology is available one-to-one to students to best support their learning needs. Additionally, learning will best occur in small groups and students may have individualized learning plans. Spaces within a classroom should accommodate varied groupings and necessitates space and furniture that is agile and can be reconfigured. We will need the ability to reconfigure space and furniture. For example, rigorous learning calls for break-out spaces between two or three classrooms for small groups to work, with the inclusion of transparency (windows) for teacher's monitoring and supervision of students.

A project-based approach to learning with transferable skills/habits such as critical thinking, collaboration, perseverance, self-management, communication, and creativity can be seen in all classrooms. Currently, it is in our marsh and pond field studies, Invention Convention, STEAM Expo, Biography Day, Authors' Week and musical and artistic creations, to name a few. Our goal is to extend these opportunities and embed them within everyday instruction. We want learning designed with the key elements of project-based learning:

- student choice and voice in learning
- in-depth inquiry
- driving questions
- significant content
- embedded 21st Century skills
- revision and reflection
- public audience to which students present their work in real-world settings.

As such, Ipswich elementary schools strive to infuse curriculum with Project-Based Learning (PBL), and to see this as a needed area of flexibility of the building's design, especially when considering the District's emphasis on continuous innovation. In order for students to participate in PBL, we need STEAM and Project-Based break-out spaces where students can create, test, and apply engineering to new ideas. This space would allow and facilitate students to construct their own understandings of concepts. Throughout, storage and counters for ongoing projects to be stored are needed. Our focus on sustainability guides that students would need access to

outdoor learning spaces. Since student demonstration of mastery through presentation is a major assessment component of PBL, we imagine needing space in the future to display student work, both physically and digitally, throughout the school in both public and classroom spaces. Students (as well as teachers) need access to a projection system.

Overall, teaching and learning in the intermediate grades depends upon teachers' and students' ability to use tools and spaces with flexibility. We envision:

- Convertible spaces and furniture to accommodate small group work and individual work
- Collaboration beyond classrooms through technology
- Additional cubby storage in classroom for student supplies rather than pencil boxes and clutter on tables
- LOTS of plugs/usb charging stations for students and for teachers
- Small group instructional spaces both within and near the classroom.

Specialized Learning/Therapies

In Ipswich Public Schools, students come first which demands that all professionals take joint responsibility for every child. Therefore, we feel it is imperative that a team approach is used to take on the responsibility of meeting these needs by providing the most effective staffing, scheduling, materials, instruction, and equipment to meet the social, academic, physical, and emotional needs of our students. As such, our team of special educators recognizes that it is of great importance to educate IPS students with disabilities in the least restrictive environments, and that these least restrictive environments are dependent on the individual needs of each student. This demands flexibility when setting up programming and schedules for our students.

Additionally, our diverse population requires a range of specialized programming, overseen by administrative Program Managers. Students with social/emotional, academic and medical challenges are fully included within general education classrooms for much of the day, but separate instructional space is required for pull-out services. Enhanced Elementary Classroom programming includes ABA services from a Behavioral Therapist with BCBA involvement and oversight. There is a need for areas where staff can easily observe students in a behavioral cool-down space. Therapies also require specialized spaces. A sensory room is currently shared with occupational therapy services and physical therapy. Sufficient space is needed for appropriate access. Speech and language services include social/emotional pragmatics as well as strategies for students with hearing impairment. Such spaces require soundproofing and thoughtful space arrangement, not existent in the current configurations. Medical conditions that require nursing care throughout the day require privacy, bathroom facilities and space, limited and difficult to provide in existing conditions.

Community and family engagement are integral components of our schools. Meetings are frequent and encouraged. Special education meeting spaces are limited, often conflicting

with ongoing music instruction. Confidential small group meeting areas are a priority in any new facility.

Looking to the future of special education within the Ipswich Public Schools, we see our beliefs and best practices continuing with an even greater population of students with disabilities. We see the need to continue to use a team approach that includes parents, flexible staffing, technology and work spaces to meet the needs of our students. Our vision includes:

- using a combination of co-taught classrooms, small groups, and one to one teaching to meet individual needs
- using one to one technologies to provide interventions throughout the day for students within classrooms as part of daily instruction
- using a resource library organized by curriculum standards and grade level with ready-made materials to deliver a modified curriculum immediately as the need arises
- providing movement areas for students who are in need of sensory stimuli to maintain attention, decrease anxiety, and process information
- providing parents the ability to do non-participant observations to learn strategies that are used with their child that can be used at home
- providing structured opportunities for students to participate with peers during academic and non-academic times throughout the day for social thinking and leisure and recreation modeling to occur and begin to be generalized.

We will need a building to support the ever-changing needs of our students. Just as our teaching approach must be flexible and responsive to what student/s we have from year to year, so must our building if we are to meet the individual needs of our student population. This can be accomplished by:

- Having large enough classrooms that allow multiple adults to be working with children and space to have small groups working within the classroom
- Having break out spaces attached classrooms or within a cohort of classrooms that can be used for small groups/one to one specialized programs to be taught (i.e. social thinking, reading, math, etc.)
- Ensuring that both the breakout spaces and classrooms both have the same access to technology
- Having a storage space for modified materials for each grade level
- Having a quiet testing office for assessments to be conducted by school psychologist, speech pathologist, occupational therapist and physical therapist is a necessity
- Having a private meeting space for IEP team meetings
- Having an alcove (L-space) within the classroom for movement breaks to occur rather than having to walk down the hall to a sensory room
- Having an adaptive gym space available for students to utilize for recess when needed to and to receive physical therapy, adaptive physical education, and recreation therapy

- Rooms/offices that are used by many students should be centrally located (almost like a
 pod with classrooms off of it) so that students do not have to go far for services and that
 the different staff members on a team are able to meet informally and formally.
- Accessibility throughout the school for students with physical needs without the reliance of an elevator (in case of emergencies)
- Accessibility in and out of the school for students with visual and physical impairments (including the playground)
- Accessibility throughout the school for students with sensory/hearing impairments/difficulty processing setting up all spaces that keep in mind acoustics and sound systems needed

RTI

Teachers at Paul F. Doyon Memorial and Winthrop Schools provide instruction to students in a variety of teaching models: co-teaching, team teaching, flexible grouping, small group instruction, and individualized instruction. Teachers understand that every student learns differently, thus differentiated forms of instruction are essential for individual success. As a result, teachers continually adjust instructional methodologies and practices to meet the diverse learning needs of every student. Response To Intervention (RTI) is the framework that affords teachers the opportunity to provide tiered levels of instruction to all students (tier one - the core classroom curriculum; tier two - strategic levels of instruction; tier three - intensive levels of instruction). Reading and Math Specialists provide service primarily at the Tier II level.

Today's variety of teaching models demands flexible structures. We envision a building design that will afford us the opportunity not only to equip our students with knowledge and essential skills for 21st century learning but one that also provides them with a bright, engaging, and equitable learning space. For instruction, we recognize the importance of a variety of flexible learning spaces: areas for student collaboration; areas for small group instruction; areas for quiet reflection; areas for presentation; areas for displaying student work; as well as areas for workstations with manipulatives. This "academic playground" will be a learning space that will encourage students to explore, take risks and find joy in their discoveries.

Today's teaching is a collaborative experience. We envision a building design that will afford us the opportunity to collaborate with colleagues. Because teaching is ignited by continuous learning, professional development is critical for maximizing the impact of interventions. For professional growth, we recognize the need for appropriate space to convene meetings, offer trainings, engage in professional development sessions, and to review and analyze student work. It must be flexible to accommodate both large and small working groups. This professional space will encourage the collaborative development of curriculum, utilize assessment to inform instruction, and foster planning for team and co-teaching.

Today's digital literacies demand space that seamlessly integrate new and innovative technologies. Students and teachers need immediate accessibility to assignments and and instructional materials from any location. We envision a building design that will afford us the opportunity to actively engage on interactive *whiteboard-like* wall surfaces. These could be written upon, should have the capacity to store the information, and then have the capability to retrieve work to be displayed again.

The RTI student learning and professional working spaces will fuel a culture of learning.

Guidance/Mental Health

Our School Social Worker is part of our district-wide mental health team with the established mission:

Our mission as elementary school counselors is to maintain a safe, accepting and positive school environment. We strive to respond with professionalism and care to the social, emotional and academic needs of our students through comprehensive guidance activities and collaboration with parents, teachers and administrators. We will encourage the development of self- confidence and social competence that is embedded within a fundamental respect and appreciation for the differences of others. Our intention is to support educational success and prepare students with skills for life-long learning.

Ipswich elementary school Social Workers are working with an increasing number of students and facilitating both adult meetings in small groups (tables and chairs) and student meetings (with medium-sized groups of children often sitting on the floor). Social Workers need flexible space for these meetings, then, along with space for their desks and materials. Ipswich Social Workers need secure office spaces that assure confidentiality (phone calls, files, conversations) as they continue to work with an increasing caseload of students in crisis. Positionally, the Social Workers' offices make sense to be located near Special Education teachers and/or the administration so that students are always "seen" by adults as the students are on their way to and from the Social Worker's office.

The role of the Social Worker is extensive with expansive possibilities always on the horizon. The Ipswich elementary student population continues to require more Social Worker services. Confidential counseling meetings with students, parents and staff and group social pragmatics instructional sessions require flexible spaces with ample, secure storage for confidential documents.

Lastly, art therapy, often used with students, requires a sink and running water. Mindfulness practices include gross motor movement, not possible in the small office space currently being utilized.

Sustainability

"When the environmental, economic and social needs of a society are met in the present without compromising the ability of future generations to meet their needs." -Sustainable Schools Project Shelburne Farms

Sustainability permeates throughout Ipswich Public Elementary Schools in a "Healthy Me; Healthy Environment; Healthy Community"-themed vision. As such, we believe that through sustainability and sustainable practices, our students will make a difference. They *are* the Healthy Me ~ Healthy Community ~ and Healthy Environment. As such, sustainability education empowers students to realize that they have an active role and responsibility for their futures.

Through "Healthy Me" education in sustainability, connections to food are deepened by providing students with the tools and equipment to experience the growing process from start to finish -- from how food is grown, harvested, and prepared -- from soil, to seed, to supper. Students are working with adult learners every step of the way. Sustainability "Healthy Me" practices promote healthy nutrition by utilizing school gardens and a "Kid Kitchen" that is accessible to children, families and community. It develops positive life skills and healthy choices in the way we take care of ourselves.

Through "Healthy Environment" education in sustainability, students are taught to respect nature and the natural world by engaging in opportunities to explore and study the natural environments around them. These practices motivate students to be mindful of our ecological footprints by providing hands on instruction in indoor/outdoor classrooms on topics ranging from recycling to water conservation, biodiversity, composting, and wind and solar power.

Through "Healthy Community" education in sustainability nurtures students' mindfulness and wellness while promoting students as stewards of their community. Here, students are provided with opportunities to engage with and give back to the community: maintaining school and community gardens and greenhouses that are handicapped accessible; promoting food access, recycling, and composting utilizing on-site facilities. Throughout, students are empowered to think critically about environmental and agricultural design and engineering: indoor hydroponic gardens; solar and wind energy; efficient watering and wastewater systems, composting and recycling systems.

In order to provide Ipswich students with the education experiences outlined above, teachers and students need a building that supports sustainability education. Teachers and students

need to be able to move with ease throughout the school, utilize outdoor spaces, including outdoor classrooms, and easily access and store the tools and materials needed to instruct students in sustainability education.

The school building itself must serve as a learning tool and should include the following elements:

- "Messy Areas" spaces where students and teachers are free to 'get messy,' have room
 to design and build, and bring the outdoors in

 -especially in the winter months
- Accessible and clearly defined recycling systems/areas including a "Swap Shop" where students and families can reuse, recycle, and share clothing, books
- A 'GREEN' design alternative energy sources (solar, wind) that allow students to actively monitor energy usage; systems that support water conservation
- A 'Kid Kitchen' that allows students to wash and prepare nutritious meals using the vegetables they've grown
- A School/Community Garden, greenhouse, composting system, and tool/materials shed
- Appropriate and ample storage for tools and materials
- Movable signage/displays the ability to change out sustainability related signs to engage and maintain students' interest.

Physical Education

Ongoing community discussions seek to improve and expand Ipswich elementary schools' athletic facilities. The community hopes this new Gym space will support both student and the community with space that promotes healthy living. Currently, limited and undersized gymnasium space requires the use of the less-than-safe cafeteria space, adjacent to the gymnasium, in order to accommodate multiple class instruction. Outdoor use of both open space and the newly-constructed playground at Winthrop assist in ensuring that gross motor and cardio opportunities are integrated into daily instruction. Storage space limitations and available space, not contingent on lunch schedules and other times when the cafeteria is occupied for a variety of reasons, must be addressed if programming is to be expanded to meet current expectations of health, wellness, and physical conditioning for lifetime fitness.

As such, Physical Education classes in Ipswich Public Schools will continue to evolve from a skill-based to a fitness emphasis. There will be an increasing focus on healthy lifestyles and healthy habits, peppered with fun ways to introduce the emphasis on fitness. This necessitates the availability of gym space to accommodate stations with options from which students may chose. Mirrors, dance space and a fitness area to be used for classroom instruction and health classes are also needed. This classroom should include hook-ups for technology and a projection systems to show visuals. It would also serve as an adjacent fitness area that can be multi-purposed--classroom instruction, dance, nutrition and health. Additionally, in order to accommodate the need for teacher planning schedules, multiple

classes must occur simultaneously. We need to create safe environments with proper supervision, so that all students are able to actively participate in a fitness curriculum that incorporates choice, while being monitored by their teachers. Lastly, an adult shower would be very helpful for our teachers who bike or run to school.

The use of outdoor space is also important to physical education in Ipswich Elementary Schools. This is aligned with our district's focus on the outdoors and learning. As such, we need outside spaces for instruction like work-out stations, walking paths, climbing spaces and outdoor fitness equipment. Our District's focus on sustainability defines that these outdoor physical education spaces and materials should be "green" and earth-friendly (for example, a permeable court that is not black top, but still allows for basketball). This also guides that the gym spaces should have easy access to these outdoor learning and fitness environments.

Lastly, the Ipswich community members have expressed much interest and need in having these physical education features be available for their use. This would be a draw to the new elementary school, and encourage healthy living throughout our community. Availability to features such as outdoor fitness stations and walking paths as well as indoor features such as the ability to create a regulation-sized basketball court would be a draw and asset to the community.

Music

Music is an integral and important component in whole child development. At Winthrop and Doyon, general music begins in Pre-K with 30 minute classes and expands to one 45 minute class per week for grades K-5. Additionally, 30 minute sing-alongs for kindergarten and first grade classes mirror 45 minute chorus classes for 4th and 5th graders. This range of instructional group size, from a single class to a grade level, combined with movement elements such as dance and rhythm concepts, drives the need for a large open space. Choral music calls for easy-to-access risers, currently available when the cafeteria is not otherwise occupied.

Instrumental music offerings at the elementary school level are the foundation to Ipswich Public Schools' award-winning high school band and orchestral groups. Commencing in fourth grade, 98-100% of students take advantage of instrumental instruction. This high participation rate continues into fifth grade. Instrumental instruction, for both band and strings, occurs twice per week for 30-45 minutes. Small group instruction, often grouped by instrument type, occurs throughout the day at various times. Scheduling spaces is challenging, often leaving groups to practice in open areas such as the hallway, stage and/or library, and even in the principal's office, regardless of the noise impact on other classes. Large group band and orchestra are scheduled twice per week and is largely dependent on space availability at the time it is occurring.

As shown, music is fundamental to an education in Ipswich Public Schools, where all students participant in general music. Additionally, intermediate students have the opportunity to participate in chorus, band and orchestra. Unlike other cities and towns, instrumental instruction is part of the school day. At any given time, orchestra, band, chorus and general music may be happening simultaneously.

Music is central to the Town of Ipswich ethos and is not an extra in elementary education. Music is embedded into a child's day. With new STEAM initiatives, music will continue to be an embedded and central part of education. Music education builds 21st century and innovation skills, such as communication, critical thinking, problem-solving and collaboration. As such, we need three spaces that can support our rigorous curriculum. These three spaces must be sound proof, in order to run several music classes/ensembles at the same time. Spaces such as these three must have proper storage, be acoustically designed for music (sound safety), sized appropriately for the number of students, have large open space for movement and exploration and for multiple configurations of ensembles/classes.

Music exalts the human spirit. Music provides opportunities for emotional expression. The Ipswich music program has long been a great gift to the local community. Ipswich citizens have become accustomed to attending top quality student performances throughout the year. Giving tools to elementary school students to express themselves emotionally will benefit their whole child development. Simply put, music is for everyone in Ipswich Elementary Schools and availability to features such as music and performance spaces would be a draw and asset to the community.

Art

The art department foresees a teaching style that fully embraces cross-disciplinary collaboration. This would possibly include team teaching with science, technology, math, social studies, literature, music, and/or theater. With this cross-disciplinary approach, designed for more project-based learning, students would require more access to information, a better connection with outdoor spaces and their community, as well as a variety of materials that would encourage exploration and play. Large spaces for materials, technology, implementation of design work, and storage for finished work would also be essential. In addition, multiple, small, user-friendly display areas would enable student sharing, reflection, and presentation of work.

In order for a building to support this type of teaching, the art room should ideally be centrally located with access to the library and other information resources, as well as to the outdoors. Bringing the outside into the classroom should be incorporated in the design. The space should allow for 2D, as well as 3D work, providing individual workspace (and drafting tables) for

students with flexible seating for a variety of age levels, and easy access (for students) to materials. A defined meeting area, a place for visual projection and written board information, a place for mechanical technology (press, loom, etc), a small area for electronic technology, a large material and paper storage area (for teacher access), a prep area with visual access to the classroom, an easily accessible and well ventilated kiln room with drying racks and room for glazes, a minimum of two-three sinks with counter space, and appropriate 2-D and 3-D storage for all students using the art room would be essential. The room should also be equipped with a sound system.

With the current proposal of two art rooms in the elementary building, the art department would like to suggest that these two rooms be located next to each other so that they could share teacher storage facilities and a single, large kiln room that could accommodate either one large or two medium size electric kilns. This would allow for the maximum amount of classroom space for each room.

Library/Media

Library programs in the future will promote information literacy through global connections and content creation. While books will always be an important part of the K-5 library, expanded technology resources (such as 1-to-1 devices) and a flexible learning environment (multi-purpose space with moveable furniture) along with a flexible library schedule will enable collaboration, creativity, and communication, linking classrooms locally and globally. Librarians will actively collaborate with teachers both in classrooms and in the library instructional space to develop lessons, provide resources, and make global connections.

The library media specialists recommend that the total space allotted to the new library be divided into smaller areas, based on function. Separate spaces will afford easier library/media access for students and staff. Here are five areas of need that we feel should be designed as **separate** spaces:

- instructional room with a storytelling/performance space and moveable furniture
- a room for books and other resources with a checkout area and quiet reading area
- seminar rooms for small group work
- media production room including green screen (not directly part of the library, but will be used by library and classrooms)
- Makerspace

Technology Integration

Over the last three years, the Ipswich School District has invested heavily in updating technology systems and re-energizing professional development. Chromebooks, iPads and

laptops are the tools that our students use each day as they write, explore, and apply literacy and math skills. Recognized as a powerful learning tool with regard to personalized learning, teachers use technology in increasingly integrated ways. There is, however, a sensitive awareness that not all families do have access to technology tools at home. Early morning computer use is encouraged during Breakfast Club. Technology tools are also available after school during Homework Club.

Future technology needs can never be predicted as new innovations and uses arise each day. Currently, to support inquiry and outdoor learning, technology tools must be portable and durable. Flexibility and an adaptability to change in both philosophy and facilities design is the expectation. As such, teachers should be able to move throughout the school in different classrooms and areas and be able to present information multiple ways using a variety of technology. This means instant access to online tools in classrooms, hallways, playgrounds and throughout the school campus. Ample charging stations would be available and support a multitude of devices (ie iPads, laptops, chromebooks, tablets, document cameras). Students would have access to multiple creation tools and spaces that enable collaboration, experimentation, recording, and video recording. Makerspaces would be accessible to all teachers and students. Makerspaces offer students a creative, educational environment where they can gather to create, invent, and learn.

In the future, consideration will be given to ensure equity and accessibility particularly for families who do not have the tools needed to complete projects and activities. Families would be surveyed and a system would be created for providing families with hotspot cards and/or loaner devices. Library hours extended past the school day and a variety of technology (desktop, laptop, chromebooks, iPads, Kindles, charging stations, etc.) would be available for after school use. Student virtual help-desk would be utilized by teachers and students to support learning. As such, the environment would be mobile and allow for learning anytime, anywhere. For example, we must consider the possibility of a 1:1 environment where students can rent to own a device or receive a loaner.

Flexibility of the learning spaces should support the technology of the future. For example, modular furniture and window placement would enable teachers to view multiple groups of students in break-out spaces. It is likely that technology in the future will no longer be contained in a lab but embedded around the campus. Therefore, individual classrooms would be large enough to house mobile carts or charging stations without occupying teaching and learning space. And, devices, selected for purchase, would have ample battery power and storage to house videos and pictures while movies are in the process of being created. Lastly, it should be noted that while primary level elementary students have not yet mastered using a server or Google drive, we would expect intermediate elementary students to be able to do so. Students (as well as teachers) need access to a projection system.

Teacher Planning and Room Assignment Policies

Effective teacher planning and collaboration is the cornerstone of high quality education for children. It is critically important for adult learners to be in a vibrant and joyful work setting. Ipswich Public School District has invested heavily in professional development, designed to build strong internal capacity in planning and collaboration. Our new elementary school building must support teacher planning space in multifaceted forms. Teachers must have individual space for quiet planning and professional reflection to fine-tune their craft to meet the unique needs of their students. Additionally, Ipswich teachers regularly meet with vertical and horizontal teaching teams requiring room to collaborate effectively. Finally, the District is committed to co-teaching which adds another dimension to the space needed for professional collaboration. Ipswich elementary teachers are well positioned to leverage individual and collaborative planning space to positively impact Ipswich students.

Food Service Program

The Ipswich Public Schools prides itself on sustaining a well-run, district managed, food services program which provides nutritious and affordable meals to students and staff. As participants of the National School Breakfast and Lunch Program, the district adheres to the guidelines, set by the USDA, which regulate school food service programs. On average, the District provides 55 breakfasts and 268 lunch meals per day to our elementary students. A debit card point of sale system is used throughout the district to account for meal sales.

At both the Winthrop and Doyon Elementary Schools the cafeterias are used for breakfast and lunch periods, school-wide and grade level concerts and public events, and for the Extended Day Program. The kitchens at both schools are antiquated, insufficient in area, and are furnished with outdated equipment.

The new school should be configured with a dedicated, full service kitchen and cafeteria space. The kitchen should be equipped with state of the art equipment that supports scratch cooking and considers food preparation for students with food allergies. There should also be a dedicated area where students can participate with food preparation. With such a strong Farm to School and sustainability community connection, community use such as nutritional cooking classes for children and families, using local produce, is of high interest. In this area, Ipswich students can learn basic cooking techniques, be educated about nutrition, explore new foods and work with local chefs. The goal is to empower Ipswich students to develop healthy eating habits through the use of whole foods. The new facility should also provide opportunities for recycling and sustainability initiatives.

Transportation Policies

The District provides bus transportation for all students in grades K-12. For regular education students and in accordance with M.G.L. Ch. 71, Sec. 68, a fee is charged to all secondary students and to those elementary students (K-6) who reside within two miles from their school. Transportation for Special Education students is either provided by district vehicles - to both in and out of district schools, or by outside transportation vendors.

Eight bus routes are utilized to transport students to the Winthrop and Doyon elementary schools. Four hundred and forty-nine elementary students are registered to participate in the transportation program. Many students are dropped off and picked up daily at both the elementary schools, causing both safety and traffic concerns. School staff, including a crossing guard at the Winthrop School, provides supervision on school property at arrival and dismissal times. The congestion at dismissal time on both properties negatively impacts the traffic flow on the streets which abut the properties.

Innovative design will be required to manage the traffic flow around the new elementary building. Since students come to school from so many varied ways, differentiated drop off and pick up areas should be employed. Areas for buses and vans, off-set queuing lanes for parents, and separate entrances for those who walk and ride bikes to school should be developed into the building plan. Every consideration should be made to ensure students safety and to minimize traffic congestion on the school site and neighboring community.

Functional and Spatial Relationships

The overall plan of the Ipswich Public Elementary School is to be configured and oriented to create effective indoor-out connections and to maximize controlled use of natural daylight in core academic spaces. The plan is to be organized with logical zoning for after hours/community use to allow access in a flexible, but controlled manner. The administration is to be positioned for natural visibility and control of the main entry/approach, as well as for the active after-hours programs. Ideally, natural visibility would extend out to the parking and play areas, but may be subject to site constraints.

Students should recognize a clear, main entry. Additionally, the building should have an independent pre-school entrance and separate, discreet service/delivery area. Nested in the objectives for access is the need to keep buses and cars separate while leading students into a recognizable main entry while also allowing direct pedestrian access from the school to outdoor spaces without crossing vehicular pathways. Furthermore, the school and grounds are to be organized to encourage a welcoming, walkable and communal environment.

Academically, the desire is to create a school that is scaled and comfortable with a neighborhood feel. The goal is to place kindergarten, special education and general classrooms

in a way that allows for multiple organizational groupings. The intent is to keep preschool separate, preschool and kindergarten on the first floor and maintain integration of special education spaces. OT/PT spaces are to be located with the gymnasium; Learning Centers are to be dispersed school-wide. A mix of break-out, small group and one-on-one spaces are to be integrated and adjacent to academic areas.

The media center, as the heart of the school, is to be located centrally and easily accessible to academic classrooms. The art rooms are intended to be centrally accessible, near or adjacent to the Media Center but will also benefit from having convenient outdoor connections and views. The music programs would ideally be convenient to art and academics, but also require acoustic separation (inside and out). The music rooms will benefit from being located in the backstage zone to allow use as green rooms and for use of the stage for music programs.

The cafeteria is intended to have a direct and visible connection to outdoor play/recess that facilitates effective oversight and natural supervision as one of the primary extended learning spaces (morning and afternoon). The cafeteria and kitchen should also have relatively direct access to the outdoor gardens, composting and proposed or future greenhouse. Portions of the cafeteria and the kitchen recycling/receiving rooms will be planned for potential community and enrichment programs that may include spaces such as a Second-Hand Shop (gently used clothes and supplies available to all), Gardening, Food Lab and as a Composting Recycling Drop.

Storage closets are to be located convenient to the lobby and cafeteria to foster additional and flexible uses for FRIES (parents organization), SLP (student leadership), EDP (extended day), and DEEP/ACE (enrichment) programs.

Security and Visibility Requirements

The Ipswich Public School Department will do an overall assessment of the new building Security Program. A security consulting firm will also conduct interviews with the IT Department as well as the Ipswich Police Department to identify the needs and requirements for full integration, operation and control with the security systems. These interviews will be critical in assessing the requirements associated with the infrastructure and the backbone on which that system will function. An assessment will be provided for the new building facility, identifying the measures recommended to protect all assets in the building. The security plan will balance a desire for unrestricted flexible learning spaces (including outdoors) with reasonable security measures. A security plan will be in place that addresses:

- Personnel, Liaisons and Supporting Procedures
- Visitor Screening Measures
- Video Surveillance Measures

- Access Control Measures
- Natural Surveillance and CPTED measures
- Internal and External Response Measures
- Existing Security Systems Integration and Function (Hardware, Software, IT and Networking)
- Parking Lots and General Site Security