Section 3.1.2

Arlington High School Educational Program

School Committee Approved

Updated 6/20/2018

Arlington High School
Arlington Public Schools
869 Massachusetts Avenue
Arlington, Massachusetts 02476

Guiding Principles

In anticipation of the need to rebuild the high school building, Arlington High School (AHS) administration and faculty have spent the last 4 years visiting schools, reflecting, and gathering our thinking on the future of instruction and the building we will need to support this future. Departments, interest groups formed around areas of focus such as school climate and culture, outside space and student leadership, and affiliated community groups were invited to reflect and create draft reports on their current and future practices and needs. In addition, the high school and district engaged in an ongoing evidence-based strategic planning and goal setting process to create our annual School Improvement Plan (Attachment 1).

As a result, we were well prepared as a community to engage in the process of visioning with David Stephen of New Vista Design. Each department and many functional groups produced statements of educational philosophy, current practices, and future needs. We held a series of 3 community forums to gather input. We also held a session with the faculty to reflect on the work we have done so far. An Educational Visioning Group comprising staff, administration, students, and community members met for a series of 3 workshops to synthesize this feedback and input into an educational vision, as well as guidance on design patterns to support that vision.

We found strong community consensus for the following Guiding Principles to govern the design of the renovated and/or new Arlington High School facility.

> At its heart, the renovated and/or new Arlington High School facility must support the best of what AHS is doing now, as well as allow the development and implementation of effective and innovative future teaching and learning practices. It must honor the enduring importance of teacher professionalism in supporting expertise in the academic disciplines and relationships in learning communities, as well as flexibly support interdisciplinary, collaborative, connected, project-based, and personalized learning.
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> AHS is committed to teaching all children and the whole child. We believe that the future of education in Arlington requires:
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> 1. *Teacher professionalism* - rich classroom and departmental work spaces to support teacher expertise and relationships in learning communities
> 2. *Inquiry and collaboration* - an interdisciplinary learning commons with research tools, technology, gathering, and breakout spaces to support teaching and learning in the future
> 3. *Creating and creativity* - specialized and distributed spaces and technology for hands-on and applied learning, including spaces and technology for making, displaying, and storage of work
> 4. *Support for students' social-emotional needs and social-emotional learning* - centralized and distributed support spaces and personnel, access to nature, and welcoming space
> 5. *Inclusive and engaged community* - welcoming spaces where we come together as a school and that also serve as a community resource

The following additional principles developed through the visioning process should also guide the design of the new facility:

Teach the Whole Child

- Foster personalization, connection, and ownership
- Meet the varied learning needs of students
- Support students in finding their place/passion
- Extend learning opportunities beyond classroom walls
- Promote social-emotional learning
- Be fun and engaging

Support Inquiry-Based Learning and Promote Inventive and Student-Centered Learning

- Provide hands-on STEM and STEAM opportunities
- Encourage project-based learning and design thinking
- Include applied and authentic learning
- Support interdisciplinary connections
- Promote visible learning

Foster School Community

- Provide accessible and navigable spaces that build community
- Locate Library Learning Commons as heart of school
- Create learning neighborhoods of common Interest
- Support interdisciplinary and collaborative learning
- Promote social-emotional health and wellness
- Encourage communication and collaboration

Envision School as Community Hub

- View school as hub of learning, activity, and engagement
- Support community access and use
- Employ a design aesthetic and sensibility of its time
- Embody a sense of history, character, and durability
- Reflect the history and aesthetic of Arlington/New England

Provide Physical and Programmatic Flexibility

- Adapt to varied and unknown future needs and uses
- Provide flexibility for 21st Century teaching and learning
- Support technology integration and evolution
- Remain flexible and future proof

Promote Sustainability

- Ensure energy efficiency
- Promote social responsibility
- Remain practical and cost effective
- Employ building as teacher
- Provide outdoor connections, gathering places, and classrooms

High Standards and Achievement

Arlington High School provides high levels of academic quality and a positive environment despite the persistent challenges presented by the facility. We continue to grow in several areas, including academic achievement, use of technology, school climate, student leadership, and personalized learning.

AHS excels on assessments of academic quality reflecting both high achievement and improvements in academic equity. AHS earned a level 1 designation on the Massachusetts School Report Card for the third year in a row. This reflects not only high performance overall, but success in raising the performance of high-needs students. It is a challenge to consistently raise student performance when achievement is high, but AHS continues to accomplish this goal.

AHS has again received Gold Medal distinction in the U.S. News & World Report Best High School Rankings, rising in its ranking both in the state and nationally. In 2017 AHS ranked 16th among Massachusetts schools, up from 19th the year before, and in the top 2% of schools nationally. U.S. News also recognized Arlington as a top school in science, technology, engineering and mathematics, or STEM, ranking 193rd nationally. Newsweek ranked Arlington in the top 2% of U.S. schools. The Washington Post profiled Arlington as one of the "Most Challenging Schools in the U.S. 68% of AHS students take at least one Advanced Placement (AP) course. Arlington recently participated in the Programme for International Student Assessment (PISA) for Schools administered internationally by the Organization for Economic Cooperation and Development. Arlington ranked at the top of Massachusetts schools and ranked among the top schools internationally, with levels of performance above those in countries such as Singapore. Furthermore, AHS has ranked higher than schools with a comparable demographic profile. Fourteen percent of AHS students qualify for subsidized meals. This means that Arlington outperforms its demographics.

Our information on student postsecondary plans shows that 94.1% of students in the Class of 2017 planned to continue their education, with 91.3% attending college, 2.8% attending prep schools and career education/apprenticeship programs. 0.4% planned to serve their country in the military, and 1.1% planned to take a gap year or other program. An additional 3% planned on entering the workforce. Thus, 98.6% of students in the Class of 2017 had a plan after graduation.

Mission Statement

In an effort to foster academic excellence and personal achievement at the highest levels, Arlington High School focuses on learning, connecting, and caring as a community. AHS provides a safe, supporting, nurturing environment in which students can acquire knowledge, values, and intellectual curiosity that will lead to lifelong learning. As a community we have agreed upon the following values and habits of mind as foundational principles that will guide all teaching and learning and policy decisions at Arlington High School.

They are:

- Integrity
- Communication
- Accountability and responsibility
- Respect
- Effective teamwork

We believe that living these values and habits of mind on a daily basis will ensure all students have a rigorous high school education that will prepare them for their future roles as learners, leaders, and citizens in a 21st century democracy and participation in an ever-changing world.

Academic Expectations for Students

Arlington High School students will:

- Gather data and critically evaluate the content, source, and relevance of that data, especially, but not exclusively, through the use of technology
- Reason logically, using appropriate qualitative or quantitative methods and use their analysis to answer questions
- Write clearly and effectively
- Listen actively and respond through inquiry, discussion, writing, and various forms of art
- Read and comprehend varied materials and be able to interpret and apply what they have read
- Speak clearly and effectively in a variety of contexts
- Demonstrate life, leadership, physical, and cognitive skills through projects, performance, and products

21st Century Focus Points Across the Curriculum

- Higher-order thinking skills through interdisciplinary learning, analysis, and synthesis of information
- Media and visual literacy
- Science, Technology, Engineering, Arts, Mathematics expertise
- Collaboration in a diverse, multicultural world
- Stress and time management
- Communication skills
- A love of learning coupled with a willingness to work hard

Grade and School Configuration

Arlington High School is a comprehensive high school serving grades 9-12 for the town of Arlington. Current enrollment is at 1328 students and is expected to continue growing. The MSBA agreed upon build-size for this project is **1755 students**. As a district, Arlington has seen high growth over the last decade with an increase of 1,160 students, representing a 25% increase in enrollment since 2007. APS continues to closely monitor expectations for future enrollment using different methods including demographic forecasts and enrollment-based projections. Both methods show the high school growing to a size above our build size in the next 10 years. However, current projections suggest anticipated enrollment increases are within a range that can be accommodated in the building described herein.

Below, we list the current enrollment projections, based on students enrolled as of October 1, 2017 and the 5-year weighted average continuity rate calculated by APS (November 6, 2017).

AHS Enrollment Projections:

	SY 2018	SY 2019	SY 2020	SY 2021	SY 2022
9	350	380	391	414	408
10	324	356	386	397	421
11	340	316	347	377	388
12	314	363	338	371	403
Total	1328	1415	1462	1559	1620

	SY 2023	SY 2024	SY 2025	SY 2026	SY 2027
9	433	448	431	486	462
10	415	440	455	438	493
11	411	405	430	444	427
12	414	439	432	459	474
Total	1673	1732	1748	1827	1857

Below are estimated enrollments based on 2016 forecast from McKibben Demographic Research.

Year	McKibben AHS Enrollment
2022	1571
2023	1598
2024	1630
2025	1647
2026	1724

2027	1783
2028	1805
2029	1836

Enrollment growth and aging facilities are straining our services and programming, but we have been resilient and creative in uses of space and staff. AHS is organized by academic departments based on state graduation requirements and special programs. Academic departments are English Language Arts, Mathematics, History, Science, World Languages, Physical Education, Performing Arts, Fine Arts, and Family and Consumer Sciences. In addition, the Special Education, English Language Learner, and Guidance departments provide specialized instruction and student support services. AHS also includes an active Library Media Center, an Interdisciplinary Makerspace, Extracurricular Activities (Clubs, Student Government, and Athletics), Early Childhood programs, a Metropolitan Council for Educational Opportunity, Inc. program (METCO), a regional Special Education Collaborative Program (LABBB), and Community Education programs. All of these programs are important to our educational mission.

AHS has implemented an advisory and house system to provide a sense of community, build stronger relationships, and ensure networks of student support. Students meet for four years in the same advisory group for daily homeroom and a weekly activity period to build relationships, school norms, and communication. Adjoining advisory groups form neighborhood clusters for larger activities and sharing. These advisory groups are organized into 3 houses, each overseen by an Assistant Principal (Dean) with a central House Office. The House Offices provide a social, supervisory, and organizational hub for students, teachers, and administrators.

Future Configuration

With a projected enrollment of 1755, the future building will need 89 classrooms to house advisories and homerooms, and to accommodate scheduling at 85% with an average class size of 23, the MSBA target. We propose 60 regular classrooms, 17 science labs, 4 art studios, and 8 vocational spaces which will all be used as advisory spaces. Necessary additional vocational spaces are not appropriate for advisory use.

Class Size Policies

Arlington High School does not have set class size policies, but we try to keep class sizes within desirable limits. Arlington offers 4 levels of curriculum: college-level (AP), honors, college and career ready (Curriculum A), and modified (Curriculum B). In addition, there are general education, inclusion, and special education classes.

Staffing constraints caused by current building limitations have generated higher than desired class sizes in many areas, as well as shortages of classes for some students. For example, our science labs are below the space limits advised by MSBA and our accrediting association (New England Association of Schools and Colleges). Only one of our 12 science classrooms meets the standard for square footage. We also do not have space for more labs, even though our science classrooms are already at over 95% usage. As a result, and despite 38% of science classes having over 27 students, we are unable to add additional science sections. Most of our current classrooms do not accommodate full-size classes. An audit in 2014 found that only 23% of our classes met the MSBA guidelines for a classroom, and those included 12 classrooms with obstructed views (load bearing wall sections).

In general, our class size practices are as follows:

- General education class ranges are initially set at 18-25 students; however, classes may run over 30 students when necessary. Classes with enrollment below 18 are not staffed unless they are necessary to meet a graduation requirement.
- We endeavor to have an average teacher load of roughly 100 students.
- Honors and Advanced Placement (AP) classes may be allowed to have 25-30+ students, but this is not desirable.
- Physical education classes are capped at 30, unless there are students with special needs.
- Instrumental music and chorus classes are not capped.
- Fine Arts classes are capped at 25 and most are enrolled at that limit.
- Some classes are capped based on safety needs or equipment availability. For example, Wilderness Survival, Backpacking, Climbing, and Woodshop can have no more than 15 students.
- Co-taught, small cohort, and inclusion classes are capped at 15 students.
- Special educational classes are capped at 12 students.

Future Configuration

- With seventeen (17) science labs, the labs will accommodate no more than 24 students.

School Scheduling Method

Arlington has a 7-period schedule that rotates on a 5-day basis. Each class meets 4 times per week for 3 x 51-minute periods and 1 x 80-minute period. In addition, students meet in their advisory groups for 8 minutes each day and for an activity period on Thursdays. On Tuesdays, there is a break for clubs and student support. Physical education classes meet 2 of the 4 periods per week, which provides a Freshman Seminar period for all Freshmen. Freshman Seminar is particularly useful for students receiving support through an Individualized Education Program (IEP). Other students can use the Physical Education classes and requirements to schedule around their needs for academic support.

	Monday	Tuesday	Wednesday	Thursday	Friday
Home	8:00-8:08 am	8:00-8:08 am	8:00-8:08 am	8:00-8:08 am	8:00-8:08 am
	B	**A**	**A**	**A**	**B**
1	8:11-9:02 am	8:11-9:02 am	8:11-9:02 am	8:11-9:02 am	8:11-9:02 am
	C	**D**	**B**	**C**	**C**
2	9:05-9:56 am	9:05-9:56 am	9:05-9:56 am	9:05-9:56 am	9:05-9:56 am
	LD	**LC**	**LE**	**LB**	**LA**
3	9:59-11:19 am	9:59-11:19 am	9:59-11:19 am	9:59-11:19 am	9:59-11:19 am
Lunch	Lunch 11:22 am -	Lunch 11:22 am -	Lunch 11:22 am -	Lunch 11:22 am -	Lunch 11:22 am -
	E	**E**	**D**	**E**	**D**
4	--12:38 pm	-12:38 pm	-12:38 pm	-12:38 pm	-12:38 pm
	F	**LG**	**F**	X - 12:40 - 1:04 pm	**F**
5	12:41-1:32 pm		12:41-1:32 pm	**LF**	12:41-1:32 pm
	G	12:40--2:00 pm	**G**		**G**
6	1:35-2:26 pm	X - 2:00-2:26 pm	1:35-2:26 pm	1:06-2:26 pm	1:35-2:26 pm

Because our cafeteria is too small to house more than a third of our students at one time, we have 3 lunch periods, which includes a split lunch. Because we have three lunch periods, during the D or E block, roughly one-third of classes need to split their class period in half, so that students can break for lunch.

1st Lunch	Fusco House	Lunch 11:22-11:47 (25 min.)	Class: 11:47-12:38 (51 min.)	
2nd Lunch	Down's House	Class: 11:22-11:47 (25 min.)	Lunch 11:47-12:13 (25 min.)	Class cont'd: 12:13-12:38 (25 min.)
3rd Lunch	Collomb/PE House	Class: 11:22-12:13 (51 min.)	Lunch: 12:13-12:38 (25 min.)	

Arlington has a 2-semester year, with 4 terms. Most courses run all year. We are currently increasing the number of 1-semester electives offered in order to provide students with more choice and flexibility. Yearlong classes earn 5 credits. Half-year courses earn 2.5 credits.

Graduation Requirements:

- Pass MCAS exam in ELA, Math, and one Science MCAS exam
- Pass 4 years of English Language Arts
- Pass 3 years of History/Social Science (to include World History, US History I, and US History II)
- Pass 3 years of Science (to include Physical Science to pass Introductory Physics MCAS)
- Pass 3 years of Mathematics (to include Algebra & Geometry)
- Pass 4 years of Physical Education (see Program of Studies)
- Pass one year of Fine Arts
- Pass 2 years of World Language (3 years of the same language is strongly recommended)
- Demonstrate competency in Computer Technology
- Perform and document 40 hours of community service
- Minimum of 106 credits required

Program of Studies: https://sites.google.com/arlington.k12.ma.us/ahs-scheduling/program-of-studies-2018-2019 (Attachment 2)

Arlington High School does not track students. Rather, we allow students to choose their classes based on teacher recommendation. Many students take classes at a mix of levels, and most students increase their level of challenge over their 4 years. Teachers make course recommendations and share that information with students. Students then make their own course selections online. Course selection is followed by individual meetings with Guidance Counselors to ensure that students are meeting their requirements and are appropriately scheduled.

Future Configuration

This is the third year of using this school schedule. It replaces a 7-period, 7-day rotation, with one period dropping each day. We plan to make further schedule changes, as AHS has

committed to changing our school times to reflect current research on teen sleep patterns. We expect to move the daily start time from 8:00 to 8:30 am.

A study team will review the schedule over the next year and will consider alternative options for 2019-2020. We are committed to maintaining time for regular advisory activities, long blocks for labs and project-based learning, flexibility for student support, and an intuitive regular structure. We are interested in developing a schedule that allows for increased flexibility, is more resistant to interruption from special events and weather and supports teacher planning.

Our facilities have limited our scheduling flexibility. In particular, shortages of classroom space, cafeteria space, and library space create limits. While we currently make use of the Learning Commons idea, our existing spaces are much more traditional and fragmented. In the future building, it will be important to have cafeteria space to allow for 2 lunch periods based not on just cafeteria size, but on adjacency to outdoors and central common spaces. We need enough Physical Education space to allow 4 courses to run at once, and a large enough Library Learning Commons to allow classes to meet and collaborate while students are also engaging in directed studies and independent work.

Teacher Planning and Room Assignment Policies

Teachers teach 5 of 7 periods in the rotating schedule with at least 1 planning period per day of 51-80 minutes. Teachers have 2 duty periods per week. Advisory counts as a duty period for most teachers. Special education teachers are not assigned a duty period in order to allow them time for liaison and academic support responsibilities. Classrooms are assigned by department. Where possible, teachers are assigned a classroom to serve as their base for both instruction and advisory. Almost all classrooms are now shared by 2 teachers, with scheduling coordinated to allow most teachers to teach in only 2 classrooms.

Future Configuration

While AHS has many undersized classes, we have also taken advantage of our larger spaces to accommodate larger class sizes. In the future building, we envision appropriately sized 850 sf classrooms with 10% of the classrooms to be 950 sf to accommodate flexible furnishings and student enrollment and interests to support a variety of teaching and learning approaches.

AHS has 9 academic departments: English Language Arts, Mathematics, History, Science, World Languages, Physical Education, Performing Arts, Fine Arts, and Family and Consumer Sciences (FACS). In addition to the academic departments, the Special Education, English Language Learner, and Guidance departments provide specialized instruction and student support services and occupy departmental spaces in the building.

In the future AHS will require 10 teacher planning suites to include office space for Department Head/Lead Teacher, storage space, office equipment, and supplies.

AHS will continue to require general classrooms of appropriate sizes, typically 850 sf with 10% (in total) to be 950 sf to accommodate flexible furnishings, increased enrollment/interest in specific courses, and varied teaching and learning styles.

Teaching Methodology and Structure

AHS is organized in academic departments based on state graduation requirements and special programs. In addition, AHS creates smaller communities and student supervision through our House and Advisory system.

The academic departments are English Language Arts, Mathematics, History, Science, World Languages, Physical Education, Performing Arts, Fine Arts, and Family and Consumer Sciences. In addition, the Special Education, English Language Learner, and Guidance departments provide specialized instruction and student support services. AHS also includes an active Library Media Center, an Interdisciplinary Makerspace, Extracurricular Activities (Clubs, Student Government, and Athletics), Early Childhood programs, a METCO program, a regional Special Education Collaborative Program (LABBB), and Community Education programs. All these programs are important to our educational mission.

Houses and Advisory

To provide a sense of community, stronger relationships, and networks of student support, AHS has implemented an advisory and house system. Students meet for 4 years in the same advisory group for daily homeroom and a weekly activity period to build relationships, school norms, and communication. Adjoining advisory groups form neighborhood clusters for larger activities and sharing. These advisory groups are organized alphabetically into 3 houses, each overseen by an Assistant Principal (Dean) with a central House Office. Though organized alphabetically, there is then a deliberate review of names and revisions made within the House to ensure students are not inadvertently segregated by national origin or ethnicity. House Offices provide a social, supervisory, and organizational hub for students, teachers, and administrators.

Classroom neighborhood serve multiple functions. They form departments, they create areas where teachers can collaborate, and they provide communities for house/advisory groupings.

Future Configuration

In addition to a central interdisciplinary Library Learning Commons, we would like to create departmental areas with department offices, teacher meeting rooms, as well as shared spaces for disciplinary collaboration. We would also like these spaces to support advisory groups and neighborhoods. We currently have 3 Houses, but we will need to organize the building to allow for a 4 House structure. Research indicates that learning communities should ideally remain under 500. Given growing enrollment, we will need 4 Houses in the future and the Houses will be organized by proximity not departments.

We host a range of assemblies for our advisory and academic programs, including class meetings, pep rallies, concerts, elections, outside presenters, performances, award ceremonies, and conferences. These activities require an ability to meet as a whole school, and in divisions in half or in quarters. To meet in these three configurations in a school of 1,755 students,

together with its staff, will require spaces in which to subdivide groups. We will require 4 assembly spaces that can house students and advisors in groups of 1,963, 982, 654, and 491. The 900-seat theater will be a little small for housing half of the school. We envision these assembly spaces as being the Gym, Theater, Library Learning Commons, and Cafeteria.

English Language Arts

All students take at least 4 years of English. Classes are taught at the standard levels (A, H, AP). General education classes develop all students to at least the Curriculum A standard, varying the intensity and time of instruction (co-taught and extended time) while maintaining high standards. Classes are organized around the concept of discourse: discussion involving students, teachers, writers, readers, critical ideas, and significant texts. The operative words in developing curriculum are think, create, grow, and imagine. The work focuses on the synthesis and application of language and ideas. Students work individually, in small groups, and in whole class activities.

English classes have traditionally involved reading and writing as the means by which ideas are expressed, discussed, and communicated. That is not likely to change in the future. The key instructional interaction is still teacher and student interacting around text. However, technology is expanding text beyond print and paper. The world of ideas, communication, story, and text is expanding into multiple platforms and media. Teaching holds more and more opportunities for teachers and students to use media through technology, and students must practice its use. We will need different kinds of spaces beyond our classrooms in order to use technology and to talk and exchange ideas. Technology will also help us reach and engage students, examine new forms of communication, and reach new audiences.

Future Configuration

ELA will continue to require general classrooms to be of appropriate sizes, typically 850 sf with 10% (in total) to be 950 sf to accommodate flexible furnishings, increased enrollment/interest in specific courses, and varied teaching and learning styles.

Old Hall is currently used as a lecture and collaboration space for large student meetings and staff professional development. We often have events in multiple spaces at the same time. We envision a 120-seat Discourse Lab (see Vocational Education Programs) located near the English and History departments to allow for multiple class presentations, debates, discussions, and professional development workshops.

The English Department will benefit from adjacencies to the research, literature, and technology tools of the Library Learning Commons, as well as adjacency to the other Humanities Departments (History/Social Studies and World Languages) for collaboration. In addition, we envision a building where the centrally located Library Learning Commons brings together and supports collaboration between STEAM (Science, Technology, Engineering, Art, and Mathematics) and Humanities Departments.

Mathematics

All students take at least 3 years of mathematics. In addition, the vast majority take a 4th year, and many go on to take additional electives. As a result, mathematics enrollment is roughly 10% above our school enrollment. In addition to the standard levels of courses (A, H, and AP), general education classes offer inclusion and co-taught classes in all of the required classes (Algebra 1, Geometry, and Algebra 2). Co-taught, inclusion classes are currently in transition from a Curriculum B standard to a Curriculum A standard. The Mathematics Department offers advanced courses up to AP Calculus BC, as well as a growing range of offerings in Computer Science, CADD (Computer Aided Design and Drafting), and digital fabrication.

The AHS Mathematics Department values the importance of analytic thinking, collaboration, problem solving, and integration across other disciplines. The Mathematics Department is organized around the following guiding principles:

- Collaboration based department and classrooms
- Aligned to state process and content standards
- Learning enhanced with technology
- Focus on reasoning and sense making
- Belief that all students can learn math

Future Configuration

We are looking forward to more flexible classrooms and department spaces that support student engagement through collaboration, presentation, and exploration of rich tasks. In addition, we welcome the opportunity to develop our specialty labs for computer science and design, as well

as ensure better adjacencies to the STEAM (Science, Technology, Engineering, Arts, and Mathematics) resources, Makerspace, and Learning Commons.

Math will continue to require general classrooms to be of appropriate size, typically 850 sf with 10% (in total) to be 950 sf to accommodate flexible furnishings, increased enrollment/interest in specific course, and varied teaching and learning styles.

History and Social Studies

All students take at least 3 years of history/social science (to include World History, US History I and US History II). As with mathematics, most students take 4 years of history and many students take additional electives. Currently, enrollment is 106% of our total enrollment. In addition to the standard levels (A, H, AP), general education classes offer co-taught, inclusion classes in the 3 required courses. Co-taught, inclusion classes are currently in transition from a Curriculum B standard to a Curriculum A standard.

The AHS History Department seeks to engage students in the study of history and social studies through authentic instruction. Students experience history through interactive, real-life based activities, perspective-taking, and a critical analysis of history that makes connections to today's society. As part of the study of history, we also look to develop students' research, critical thinking, and writing skills, as well as modeling and cultivating their ability to engage in civil discourse, leading students to be prepared to become active members of the society they live in and engaged global citizens. The History and Social Studies Department organizes around the following mission and key values:

- Valuing authentic, real world experiences where students can 'do history'
- Emphasizing historical thinking skills and mindsets
- Promoting civil discourse and collaboration among students
- Allowing students to demonstrate, synthesize, and apply their knowledge of history in line with 21st century media skills

Future Configuration

We are looking forward to more flexible classrooms, integrated technology, work spaces, presentation spaces, and department spaces as we continue to implement the revised MA History Frameworks 2019-2020 and updated MCAS assessment. We look forward to increasing use of multimedia, interdisciplinary projects that ask students to tap into a variety of skill sets. These will include original student research based upon inquiry questions. Civics and civic engagement will be an increasing focus. We are working toward a Civic Engagement Certificate to add to the high school's offerings of interdisciplinary certificates.

As with the English Department, the History and Social Studies Department will benefit from adjacencies to the research, literature, and technology tools in the Library Learning Commons, as well as adjacency to the other Humanities Departments. In addition, we envision a building where the centrally located Library Learning Commons brings together and supports collaboration between the STEAM and Humanities Departments.

The History/Social Studies Department frequently hosts debates, speakers, moot courts, and other large group discourse events. Currently our best space for this purpose is Old Hall. The 120-seat Discourse Lab (see Vocational Education Programs) will provide a flexible breakout space for many collaborative and interactive projects.

History/Social Studies will continue to require general classrooms to be of appropriate size, typically 850 sf with 10% (in total) to be 950 sf to accommodate flexible furnishings, increased enrollment/interest in specific courses, and varied teaching and learning styles.

Science

All students take at least 3 years of science. As with the other disciplines, most students take 4 years. All students take Physical Science as preparation for the MCAS, followed by Biology and Chemistry. In addition to the standard levels (H, A), Concepts in Physical Science is offered at the Curriculum A level in a co-taught, inclusion setting. Inclusion offerings will be expanded to Biology and Chemistry over the next 2 years. The Science Department offers advanced courses through AP, including Biology, Chemistry, Physics (1 & 2), Environmental Science, and Anatomy/Physiology. Applied multidisciplinary courses include Environmental Science, Astronomy, Oceanography, and Engineering. As a result, many students take more than the required 4 years of science. Total science enrollment is roughly 110% of our total enrollment.

The Department is constantly considering and piloting new courses as staffing, space, and interest allow. We are currently considering courses in Neurobiology, Weather and Climate Change, Pharmacology, Writing in Science, and History of Science. The Interdisciplinary STEAM Design Thinking Certificate represents part of our efforts to integrate STEAM and design thinking across student experiences, disciplines, and courses.

Science is the department most hampered by the current facility. Only one of our labs meets the MSBA guidelines for square footage. We currently have only 12 science classrooms. Almost all of the labs have obstructed views. Not all classrooms are designed or fully outfitted as labs. The labs are currently over 95% usage, which makes it difficult to schedule additional sections.

With new facilities and the ability to house additional staff, we envision the following:

- Increased collaboration between science classes (increased common project rooms, presentation rooms, and equipment rooms)
- Connecting with applications in the real world, especially the local community
- Interdisciplinary coursework and projects
- Increased Digital / Virtual connections (guest speakers, collaborative groups, etc.)
- Increasing lab components (engaging in the Scientific Practices – in the school and in the community)
- Heavier use of modeling scientific systems and applications

Future Configuration

With 1,755 students and the MSBA recommended size for science classes, and 85% usage, the MSBA formula will call for 17 science classrooms. At our 110% enrollment rate, we will need to

accommodate 1,931 students, which will result in average class sizes of 22 at an 85% usage rate (or require 19 labs for class sizes of 20). Given that our enrollment is projected to rise to 1,857 in 2027, with 17 labs at 85% usage, we will need class sizes averaging at 23.

	Course	**School**	**Course**	**#Class/Size**	**#Class/Size**
Year	**Enrollment %**	**Population**	**Enrollment**	**20 students**	**23 students**
Build size	100%	1755	1755	**17.2**	15.0
Build size	110%	1755	1931	18.9	16.5
2027	100%	1857	1857	18.1	15.8
2027	110%	1857	2043	19.9	**17.3**

We are looking forward to state-of-the-art labs that can be outfitted flexibly for the different science disciplines. With our focus on departmental collaboration, we would like our labs to be grouped together and adjacent to the STEAM (Science, Technology, Engineering, Arts, and Mathematics) resources, STEM Computer Lab, Makerspace, and Learning Commons. In addition, adjacency to the Envirogarden (See Outdoor Spaces) will also facilitate outdoor programming.

Science labs will remain departmental and will be located near each other. Currently and in the future specialized labs are distributed throughout the facility and accessed by other departments as necessary for inter-disciplinary work, this will/would be the case for science labs as well.

World Languages

All students take at least 2 years of a World Language. Most take a 3rd year, as this is an expectation for many state and competitive colleges. We strongly encourage students to continue in the same language. Arlington offers 5 languages, Spanish, French, Latin, Mandarin, and Italian. Most students enroll in grade 9 in Level 2 classes, having studied the languages in middle school. Italian study is only offered at the high school level. Students have the opportunity to study to the AP level in Spanish, French, and Latin. The program is growing in Mandarin and Italian as more students enroll in the earlier years. Students may enrich study in languages not offered by taking approved online courses. General education classes develop all students to the Curriculum A standard, varying the intensity and time of instruction (co-taught and extended time) while maintaining high standards.

The World Languages Department goal is for students to develop the ability to communicate effectively, think critically, and participate actively and responsibly in a multilingual global society. Central to their curriculum are the following goals:

- Follow American Council on the Teaching of Foreign Languages (ACTFL) recommendation that language educators and their students use the target language as exclusively as possible (90% plus) at all levels of instruction
- Include culture as an integral component of communication
- Develop 21st century skills of collaboration, communication, critical thinking and creativity by exploring other cultures and imagining the world from a different perspective

To recognize and support learning beyond the classroom walls, Arlington sponsors multiple international trips (5 per year), has partnerships with multiple communities outside the U.S., welcomes roughly 40 exchange students each year, promotes language literacy with the Seal of Biliteracy, and supports the Interdisciplinary Global Competency Certificate. To support access, we have developed a scholarship program for our international trips.

World language learning will be increasingly affected by technological advances, allowing learners to collaborate with peers throughout the world to address global challenges and issues of social justice. The current Language Lab is small and out-of-date for the current use of instructional technology. Many teachers are reaching out beyond the lab to use other labs, Chromebooks, and iPads for more flexible programming. Already, Arlington is piloting the use of virtual reality. Students participating in the Paris Café Project collaborate with other programs and spaces, such as CADD/Digital Media Lab, Makerspace/Woodshop, Art, Math, and Music-Jazz Club. The Paris Café Project students present projects to judges in the Computer Lab.

The current spaces for the World Language Department are among the most challenging in the building. The classrooms are small with irregular shapes, obstructions, poor sound proofing, awkward technology, and poor adjacencies.

Future Configuration

We are looking forward to large, flexible classrooms and department spaces that support student engagement through collaboration, presentation, and exploration of rich tasks, spaces where students can flexibly meet in small conversation groups, privately do oral assessments, and receive whole group instruction. Teacher classrooms allow for the creation of immersive language community environments. In addition, the department looks forward to a Language Multimedia Immersion Lab space that would have space, technology, and a kitchenette to support presentations, language immersion, testing, hosting exchange students/gatherings (30-40 students), performances, and productions.

World Languages will continue to require general classrooms to be of appropriate size, typically 850 sf with 10% (in total) to be 950 sf to accommodate flexible furnishings, increased enrollment/interest in specific courses, and varied teaching and learning styles.

Physical Education

Physical Education (PE) is a 4-year state requirement. Students take a full-year of Physical Education in grade 9, 2 quarter terms in grade 10, and 2 additional quarter terms for grades 11 and 12. In addition to physical activity, the grade 9 Physical Education program includes health instruction and basic CPR. After grade 9, students can choose from a wide array of options including offerings as broad as climbing, winter survival, backpacking, yoga, mindfulness, personal fitness, weight lifting, walking, and team sports. Students currently enroll in Physical Education beyond the minimum graduation requirements. Only a handful of students receive waivers for outside activities.

Currently 4.6 PE teachers make use of 4 PE spaces and a classroom. In addition, the Fitness Room and Gym are supervised by a paraprofessional (BSP) to allow access when classes are not in session. PE spaces are currently used at 89% capacity during the winter and inclement weather. We run 3-4 activities every period. The Fitness Center is in almost constant use.

The curriculum is organized around a guiding principle that students will demonstrate integrity, persistence, and the ability to work independently and cooperatively to attain their physical and mental health needs. As we move forward, we hope that all students will make informed, responsible judgements regarding their personal, emotional, and physical well-being. Ability to engage and participate in PE is the beginning of lifetime health. Healthy eating and stress relieving techniques are key to mental and physical health.

Currently, the PE Department has access to 2 gyms, the Toz (Red) Gym, which houses the main basketball court, and the Blue Gym, which houses climbing and gymnastics apparatus. In addition, Arlington makes use of the Fitness Center, Health Classroom, and alternative spaces including The Pit (small gym) for activities such as dance or yoga. Many academic, special education, and student support programs use the Pit as well. These include:

- Workplace
- Summit
- Engineering
- Physical Science
- Preschool
- LABBB Educational Collaborative
- Student Council (Blood drive, culture day, etc.)
- English
- Students can also request access to the gym during any unscheduled time. Open gym time provides a needed break, central to mental and physical health for many students.

Future Configuration

In the proposed plan, we are not asking for additional space. In fact, the plan calls for a reduction in the spaces available to us. We will reduce from the current 26,665 sf to 26,000 sf of PE space. In addition, we will move from 4 gym spaces to 3. Our hope is that, with the consolidation and improvement of PE spaces, we will be able to maintain our level of programming in better, if smaller, spaces. In addition, the PE spaces are used for educational athletic programming by our 30 athletic teams (discussed within the Athletics section).

The current Red (Toz) Gym strains to hold our existing enrollment at 12,740 sf and is too noisy to handle 2 classes at the same time. In a new 16,000 sf facility, we hope for a flexible gymnasium space, with sound treatments that make it effective as 2 PE teaching spaces. The space would contain an indoor jogging track for year-round training activities (currently winter walking and jogging opportunities are extremely limited).

In addition to our Physical Education Programming, the gym is the only space that can seat the entire school for assemblies. Seating for up to 2,000 students and staff, and a gym design for reasonable performance space with acoustics, sound, and projection, will be important for our Advisory Program, Performing Arts, and other programming.

Physical Education will also need an alternative space for teaching activities such as dance, climbing, and yoga. In order to accommodate the needs of our climbing apparatus, wrestling mats, batting cage and gymnastics equipment, we envision a replacement for our Blue Gym with a 7,000 sf alternative PE space.

The current 4,000 sf Fitness Room is in almost continuous use during the school day and after school. We plan for a more efficiently designed 3,000 sf Fitness Facility.

PE will also require adjacency to a flexible classroom space for Health, CPR, and First Aid instruction.

The flexibility of these spaces depends on the ability to change equipment and apparatus. Climbing apparatus, heavy mats, batting cages, and similar equipment must be easily raised

and lowered, or stowed. Storage for climbing gear, mats, balls, rackets, nets, and a host of athletic equipment is crucial to making this a useful and effective space.

The PE spaces should include an athletics entrance for events and access to the fields. The PE/Athletics spaces should be able to be locked off from the rest of the school, when appropriate, to allow for security during after school events. In addition, connections should allow movement for larger events from the gyms to the Library Learning Commons. For example, AHS hosts events such as the College Fair and Speech Competition that utilize all of our large spaces.

We have also requested an Alternative Physical Education space for our Special Education Department to support their programming. These programs should be adjacent to the PE spaces and to the related support programs.

Visual Arts

All students take at least one year of fine art, focused on aesthetics and the creation of art, either through the Visual or Performing Arts Department. The Visual Arts Department offers a wide variety of media and techniques that encourage students to explore and strengthen their creativity and problem-solving skills. The project-based curriculum is designed to develop studio thinking habits that make expressive, personal and original work possible. Currently the Visual Arts Department offers a broad course selection, including options such as Introductory Studio Art, Painting, Sculpture, Mixed Media, Ceramics, Advanced Portfolio Prep, and AP Studio Art. The Interdisciplinary STEAM Design Thinking Certificate represents part of our efforts to integrate art and design thinking across student experience, disciplines, and courses.

The Visual Arts Department is guided by the following principles:

- Educate the whole student
- Emphasize reflection, critique, and exhibition
- Collaborate with other disciplines
- Foster connections to the greater Arlington community
- Build awareness of contemporary and historical artists and social issues
- Support students' social and emotional needs

In the current facility, our 3.6 art teachers use 4 studio classrooms, including a ceramics studio, the Digital Arts Lab (shared with CADD), the Makerspace, and a gallery space to support the wide range of activities and projects. The Visual Arts classes are already at full capacity of 25 students per section.


Future Configuration

With 1,755 students, we would expect to have enrollment climb by a corresponding 32%. That will require 4.8 teachers. With our existing 4 classrooms, we would be just over 85% usage. We propose to keep 4 art studios in the new facility.

We hope for improved arts facilities that support curriculum and instruction and an overall building design that promotes integrated studies and connections with other departments (STEAM). "Open studios" provide the space and equipment for students and teachers to work effectively in a choice-based program. In addition, we envision a high school that is visually stimulating, with ample display and gallery space to share work.

Specifically, Visual Arts should be near the Makerspace Suite and the Digital Arts Lab. Adjacencies to the other STEAM departments will also help advance collaborations on the role of design thinking across the disciplines.

Performing Arts

The Department of Performing Arts comprises performance programs and academic studies in music and the theatre arts. Students are engaged in hands-on authentic experiences in performing, creating, responding, and making connections between the arts and with other disciplines. The program creates award-winning ensembles and productions with an impact on school culture, the community, and even internationally.

Current offerings include:

- Four instrumental music ensembles focusing on band, orchestral, and jazz music
- Four choral ensembles focusing on a varied repertoire of choral and vocal music for men's, women's, and mixed choirs
- Digital music technology
- Sequential courses in theatre and film studies
- Extensive co-curricular drama and musical theatre opportunities emphasizing performance, production, and technology

- Multiple music and drama performance opportunities

Students learn in and experience music, drama, theatre technology, and dance in a connected and collaborative environment, are immersed in the arts, and can make connections with other disciplines. We currently achieve these results in spite of our limited and aging facilities. We currently make full use of the following facilities:

- 916-seat Lowe Auditorium with 2,140 sf stage
- Little Theater
- Band room
- Chorus room
- Digital Production Lab and Production Studio
- Practice rooms and an ensemble space
- Set and costume storage

Future Configuration

We expect to continue with the existing types and numbers of spaces, but with appropriate size, adjacencies, equipment, and design. Arlington High School students have access to high-quality educational programs in the performing arts that will be supported and enhanced by state-of-the-art facilities.

We are requesting to keep (in concept) a 900-seat Auditorium to house our 3 theatrical productions, 12 concerts, regular assemblies, parent nights, and outside collaborations. For assemblies that are part of our advisory and other programming, the 900-seat auditorium allows us to meet with the whole school in 2 assemblies. For many events, such as the all-town concerts, we already need to have multiple day events to allow all of the parents and families to attend. Our current 2,140 sf stage already strains when our entire music program of roughly 250 performs together. Participation in our stage productions is also limited by the number of students we can fit on stage. For this reason, we plan to keep our current size and theater seating in a better designed and more flexible theater. A state-of-the-art theater would support theatrical productions, theatrical technology, and other programming. An improved theatre would add fly space, wings, state-of-the-art lighting and acoustics, projection, and 2 x 500 sf stage extensions to allow for larger productions and music ensembles.

We envision the Auditorium as a flexible theatrical space. We require a 900-seat space to accommodate multiple events throughout the year. We have regular class meetings, assemblies, and events in which we divide the school in half to meet with upper and lower classes. Many events such as the winter and spring concerts, all-town concerts, alumni invitational concert, and the acappella festival play to full-houses. We envision a theater with a balcony to allow closer seating. In addition, the balcony can be closed off to create a medium sized, more intimate setting. The stage extensions can also be used, where appropriate, to reduce the amount of seating to suit the event and the expected audience. In addition, the Performing Arts Classroom can be used for still smaller productions.

Our Little Theater is currently 1,340 sf and seats roughly 50 with a small stage. In a better configured, 3,000 sf space, we would have more flexibility for programming and be able to accommodate roughly 120 seats. This performing arts classroom would support our student directed one-act plays, theater classes, and serve as a larger production space for our Digital Production Lab and Production Studio. Adjacency to the larger theater would allow the space to serve as a staging area for large theatrical productions.

Our instrumental and choral music ensembles are scheduled to allow the entire ensemble to rehearse together. The concurrent scheduling creates a much stronger program, but it strains our existing Band Room and Chorus Room. While the MSBA documents state, “Assumed use - 25% Population - 5 times/week” for these spaces, a strong program requires space where the entire band or chorus can regularly practice as a whole.

The current Band Room is only 1,500 sf, and poorly serves our award winning instrumental music program. With a 75-student band and a 115-student orchestra, the program requires a larger practice room. The recommended 1,500 sf space in the MSBA guidelines describes a 50-100 student band. Our current orchestra is already over this range. With 32% enrollment growth, the band will undoubtedly grow. A 32% larger instrumental program of 150 students would require a band room of at least 2250 sf, based on MSBA numbers. The recommended standard for sound for a band room is a minimum of 2500 sf. We are, therefore, requesting an 2,500 sf Band Room, as well as Practice Rooms and Ensemble Space. (https://www.wengercorp.com/Construct/docs/Wenger%20Planning%20Guide.pdf) .

The current Chorus Room measures 1,320 sf. Our current choral program serves an 80-student mixed chorus and a 30-student Madrigal chorus. Enrollment in our chorus is already increasing

and with enrollment expected to grow by 32% to 39% we envision a chorus of up to 150 students. A 1,500 sf chorus room is expected, by the MSBA, to serve a 50-100 student chorus. Thus, to accommodate growth in participation and enrollment, we estimate the need for a 2,500 sf Chorus Room.

The current Digital Music Lab resides in a less than ideal space in the corner of the Library. We plan for a new Digital Production Lab and Production Studio to support instruction in music theory, production, and composition to be located near Performing Arts (see Vocational Education Programs).

Our current Digital Production Lab hosts classes in music composition, scoring, creation, and performance. Computers and digital instruments currently support classes of up to 20 students. We supplement the lab with student devices and peripherals, so it can accommodate up to 27. The music room also has a production lab that allows video recording and production. Currently other courses use the studio for recordings and small video productions. The future lab would be adjacent to the Performing Arts facilities and house classes of up to 25 with spaces for keyboards, instrument storage, and full production studio, allowing for classes and interdisciplinary production work.

The new Performing Arts facilities will strongly benefit from being adjacent to one another and able to share space and interact easily. In addition, set design will benefit from adjacency to the Makerspace.

Family and Consumer Sciences

The Family and Consumer Sciences Department (FACS) offers elective opportunities focused on practical problem-solving, collaboration, and life-skills. Currently, FACS offers courses in Culinary Arts, Early Childhood Education, and Interior & Fashion Design (earning art credit). Students learn skills and obtain information that assists “individuals, families, and communities to make informed decisions about their well-being, relationships, and resources to achieve optimal quality of life.”

Current programs use 2 culinary labs, 1 multipurpose classroom, and students observe/participate in practicum in the Preschool and Daycare. FACS continues to build community partnerships through capstone projects and internships in Early Childhood and Culinary. FACS works closely with the Interdisciplinary Makerspace on curriculum goals. The department has been strongly involved in development of the Interdisciplinary STEAM Design Thinking Certificate.

Our Early Childhood Education Program hosts a Daycare Program for up to 12 children ages 3 months to 2 years, 9 months. This program serves the children of APS staff and provides hands-on experience for our Early Childhood students. The Daycare is an integral part of the FACS/Early Childhood Education Program and the Early Education Certification Program offered at AHS. Students do adjunct hours in the program in their early classes. Early Childhood Education students complete internships in junior and senior years.

Future Configuration

In the future, we are planning to continue with 2 Culinary Labs, the Interior Fashion Design Classroom, and the Early Childhood Education (ECE) Program.

The ECE Program requires 35 feet of open space per child (420 sf), a separate sleeping room, a bathroom, a kitchenette, and an outdoor play area. At capacity, the program employs 4 staff. Ideally, the program would be located adjacent to the Preschool and be able to share the Preschool drop-off.

FACS is excited about the prospect of expanding hands-on learning experiences through adjacencies, programming and partnerships with a student-run cafe, partnerships with the school store, and partnerships with Food Service. FACS is committed to developing further opportunities to prepare students for their future homes, careers, and communities.

Guidance

Our Guidance Department provides a full range of supports for academic planning, post-secondary transition, and social-emotional support. As part of our Student Support Team (SST), Guidance works with Deans, Special Education, Nurse, and Social Workers to coordinate supports for students, teachers, families, and departments. In addition, our Guidance Department partners with local agencies to coordinate and refer services to students and families.

Each Guidance Counselor is assigned between 200-250 students. Students are divided alphabetically across the 4 grades. Counselors keep the same students for their high school career. Students meet with Counselors for course selection and scheduling and follow up for any course changes. Counselors serve as the coordinators for Section 504 Accommodation Plans, coordinating meetings, writing, and overseeing implementation of plans. Counselors also provide referrals for internal crisis intervention/social work support, usually through the SST process.

As part of the 4-year planning process counselors hold seminars with students and evening parent programs to deliver a developmental guidance curriculum. They provide college and career advising and assist with the college admissions process. They host college representatives during the school day and hold an annual regional college fair.

Future Configuration

While the current department has 6 Counselors and a Guidance Department Head, we expect to grow to a staff of 9 with enrollment growth to 1,755. Currently 3 counselors are clustered together with the Guidance Secretary in the Guidance Office. The offices for the other Counselors and the Guidance Department Head are scattered throughout the building, based on space availability. Often the department hosts interns, in order to provide additional student support. Consolidating the department in one office with reception, a college research area, and access to a conference room will improve coordination and student access. We envision a central space adjacent to the Library Learning Commons, so that students can easily and discreetly access support.

Special Education

Special Education services address the individual and diverse learning, social, and emotional needs of students who require specialized instruction, and/or related services, in order to access the general education curriculum, take part in the life of a high school student, and meet graduation requirements. Our Special Education Department works in collaboration with the general education departments to provide a range of evidence-based programming to meet the needs of a wide range of students. Programming includes 3 specialized programs (Reach, Compass, and Summit) as well as 2 integrated program “suites” (Millbrook and Workplace), which address student needs for social-emotional support and academic support. Students in inclusion settings receive a range of services from accommodations in general education classes to more supported programming in substantially separate, co-taught, and extended time courses. Special Education also provides students with transition assessment and services to prepare for post-secondary education, employment, and independent living. Expertise in the Special Education Department is provided by a range of specialists, including Social Workers, Speech and Language Pathologists, Reading Specialists, School Psychologists, Occupational Therapists, Physical Therapists, Board Certified Behavior Analysts, Team Chairpersons, and a Coordinator.

Specialized Programs

Reach Program

The Reach Program is one of 3 specialized programs offered at AHS. This population of students has a variety of needs based around challenges in executive functioning skills, social cognition and emotional regulation skills, sensory integration, and cognitive rigidity.

Currently serving up to 28 students with 2 Teachers, 4 Behavioral Support Personnel (BSP), and 1 Social Worker, as well as access to other services (particularly the Speech and Language Pathologist). The program also serves as a homeroom, advisory group, and home base throughout the day. The program provides students social-emotional services, academic support, and instruction in social pragmatics. As the program population and its success grows, it is experiencing both increasing numbers as well as students who are more profoundly impacted by their disabilities. These students may require Applied Behavioral Analysis (ABA) and discrete trial training, direct instruction in activities of daily living, and functional academics. Currently, the Reach Program operates the AHS School Store. Due to space issues, the program recently moved from a classroom space to a mobile kiosk.

Future Configuration

The program is currently located adjacent to the Library Media Center. A central location adjacent to the Library Learning Commons, near the Nurse, and with easy access from outside would be desirable in the future. A central location will provide discreet access to resources and support programs, rather than isolating or stigmatizing the program. The program will require 2 classrooms, 2 small group rooms, 1 quiet room, and offices with separate access for Social

Work and Speech and Language services. In addition, a Life Skills Café and Store will be a valuable program for transition and life skills education.

Compass Program

Arlington has traditionally had a substantially separate Compass Program that serves special education students who require specialized instruction in activities of daily living, such as self-care, banking, navigating the local community, and instruction in independent living skills; often this program would have a direct and substantial relationship with a 18-22 year old, post high school adult program.

Currently there is a small cohort of these students and, as a result, they are placed in out-of-district programs. In order to have these students take part in their local school community, a program needs to be created.

Future Configuration

The program currently has an identified population rising through the elementary and middle school and will need to support at least 12 students through their high school years, from ages 14-17, and then from 18-22. This program will be designed to prepare the students with independent living skills, so as they transition into their adult years they understand the essentials of day to day functioning and take part as a contributing member of their local community.

The program will require 1 teacher and 1 BSP for the high school age program and the same for the ages 18-22 substantially separate program. Each group will require its own classroom, for a total of 2 classrooms. In addition, the program will require an Activities of Daily Living/ Life Skills Classroom designed to provide a simulated daily living experience, including a kitchen, laundry, bedroom, bathroom, and living space. This classroom will also be a resource for Reach, Summit, and the Workplace. As with Reach, adjacencies to the Library Learning Commons and other support and Special Education services will be desirable. The program will also benefit from access to the Life Skills Café and Store and the FACS programs.

Life Skills Cafe and Store

The current School Store operates as a life skills, job transition, and social skills program for our Reach Program. Students from economics classes have also partnered with the program to provide support. Due to space issues, the program recently moved from a classroom space to a mobile kiosk. In the future, we envision a Cafe and Store operated by students from Reach and Compass and supported by partnerships with economics and FACS. The space would ideally, be centrally located so as to be accessible from the Reach, Compass Programs, and the Cafeteria.

Social-Emotional Programs

Arlington has created integrated programming for students with social-emotional challenges. This Integrated Program allows us to offer a continuum of services from substantially separate to inclusion settings to support students with both internalizing and externalizing social-emotional challenges. These programs include Summit, Mill Brook, and Workplace. The Harbor/Shortstop Program is also part of this suite of services but will be discussed and located with programs focused on academic support.

Future Configuration

Our current facilities have pushed these programs to different corners of our facility, but they would benefit significantly from adjacencies and design that allow faculty collaboration, improved student transitions, and a separate exterior entrance. The goal is to allow the programs (Summit, Mill Brook, and Workplace) to be adjacent and connected vertically, and also to allow each program to be connected to the building centrally. See the AHS Adjacency Diagram.

Summit Program

The Summit Program is designed for students with significant social emotional impairment. Its mission is to provide students with a therapeutic program within the context of a comprehensive high school environment. Like Reach, the program serves as a homeroom, advisory group, and home base throughout the day. Students range from those who spend almost all day in substantially-separate classrooms to those who are primarily served in general education classes. The program provides social-emotional services, direct instruction in academics, and direct instruction in social skills. Summit currently serves up to 24 students with 2 teachers, 2 BSPs, and 1 Social Worker. While the program space is constrained by our building, the current space has 2 classrooms, a Social Worker's office, and a quiet room for students to use for calming and reflecting.

Future Configuration

Space requirements include 2 classrooms, 1 quiet/small group room, and a Social Worker's office. The program would make use of the Special Education Alternative Physical Education Space for PE.

Mill Brook Transition and Assessment Program

The Mill Brook Transition and Assessment Program is an integrated program. Currently located in a nearby building, Mill Brook serves special education and general education students who are in a state of transition that may include academic, behavior, and/or social emotional needs, or placement evaluation. Many of these students experience significant difficulty interacting with students in the larger building and require a separate exterior entrance. The program provides complete academic programming in a self-contained, small group program with a high level of support. Students eat lunch and spend their entire day in-program. In addition, the program provides a range of evaluation services for both special education and general education students. The program is staffed by 1.4 Teachers, 1.5 Social Workers, and 2 BSPs, with additional support staff as necessary. The current space has 2 classrooms, 2 offices, a lunch room, 2 bathrooms, and a small kitchen.

The usual placement at Mill Brook lasts for the evaluation period, after which time students transition within the integrated program (to Summit, Workplace, or Harbor), to their district of origin, or to an out-of-district placement. The current program serves up to 24 students at any one time. Last year, it served over 60 students total. Programming includes the core academic disciplines, art, music, physical education, social work services, and social skills.

Future Configuration

Space requirements include 2 classrooms, a quiet/small group room, and a Social Worker's office, bathrooms, and a kitchenette/lunchroom. The program would benefit from adjacency to the Special Education Alternative Physical Education Space for PE.

Workplace

Workplace is an inclusion program at AHS to meet the needs of students who benefit from learning in a different environment than the traditional high school. Workplace focuses primarily on relationship building within the parameters of academic growth, social responsibility, emotional health, community awareness, and career possibilities. Classes for Workplace students are small, individualized, and structured. The Workplace program offers a combination of challenging classroom experiences and specialized services. A major component of the program is centered on the Omni Class where students work on self-awareness, group trust, leadership, and community service. The program serves up to 24 students with 2 large classrooms, a quiet/counseling room, a storage room, and a kitchenette.

Future Configuration

Workplace will need space similar to its current configuration: 2 classrooms, a quiet/counseling room, a kitchenette/sink, and storage for adventure equipment (e.g., camping, crafts, outward bound). We would like the program to be adjacent to Mill Brook and Summit to help program coordination. However, the programs should be separate from each other and Workplace will benefit from a location that is more connected to the school as a whole relative to Mill Brook and Summit.

Academic Support Programs

Arlington has created an Academic Support Suite in the Library and additional classrooms throughout the building. As with the system of social-emotional programs, these programs allow us to offer a continuum of services from self-contained to inclusion. These services include Academic Support, Testing Center, and Harbor/Shortstop. In addition, students have access to the general education Learning Center. As with all of our facilities, Special Education programming makes the most of our aging and cramped spaces. We have grouped most of these programs in the Library to create positive adjacencies and collaboration. Academic Support classes are located in the departments.

Future Configuration

In the new building we would like to locate support programs in adjacent spaces near the Library Learning Commons and position Academic Support classrooms in each of the departments. Appropriate adjacencies will help these programs better coordinate and serve students.

Academic Support

Academic Support (formerly known as the Resource Room), provides a setting for students to receive services mandated by IEPs. Students access Academic Support for direct instruction, organizational and executive functioning instruction, and accommodations. Each program serves a maximum of 12 students per state requirements. We currently have 4 locations with 12 teachers. These are also the teachers that provide small group instruction in the content areas. Because of our shortage of space and poor layouts, these spaces are shared and not always in ideal locations adjacent to their related departments.

Future Configuration

In the future, we plan to distribute those teachers across 6 locations with 2 teachers per setting. These programs should be located adjacent to each of the academic departments, to provide inclusion support, easy access, and disciplinary collaboration.

Testing Center

The Testing Center is staffed by 1 BSP and offers supported study and testing accommodations, as required in students' IEPs. The program is located in the library, adjacent to the Harbor and Shortstop Programs and the Learning Center and has space for up to 12 students.

Future Configuration

Ideally, this classroom would have study carrels and a work table for up to 12 students. With placement adjacent to the Library Learning Commons, the Learning Center, and Harbor/Shortstop, students would continue to have easy access to research tools, study space, and tutoring. Students in Harbor/Shortstop could easily access testing accommodations without traveling through the building.

Harbor and Shortstop

The Harbor and Shortstop Programs are inclusion programs that work together to address students with long-term and short-term mental health and medical issues.

Harbor is a long-term support program that addresses academic, social, and emotional needs of students with chronic mental health or medical issues. Instructional Specialists and Social Workers collaborate with students, families, teachers, and outpatient providers, individualizing each student's support plan. Students in Harbor attend Homeroom, Advisory, and one scheduled Harbor Study block each day, as well as regular check-ins with their assigned Social Worker.

The Shortstop Program is a short-term program providing tutoring and counseling support for students returning to school after an extended absence of 7 or more days that is caused by emotional and/or medical reasons. An Instructional Specialist and Social Workers work closely with students and their teachers, enabling them to catch up with assignments and quickly return to classes. Students are offered up to 2 full days in the Program classroom, and up to eight additional days of help during their study blocks. Those students who require long-term support after Shortstop may be referred to the Harbor Program.

Roughly 100 students cycle through the Harbor and Shortstop Programs in a given year, with Harbor serving up to 30 students at any given time. The programs are overseen by 2 Social Workers and staffed by 3 Instructional and Student Support Specialists (Tutors). The programs currently have 1 medium and 1 small classroom. Social Workers have individual offices located throughout the building.

The social workers who supervise Harbor and Shortstop also provide counseling services to other students. These clinicians meet with upwards of 200 students per year. Social workers work in close daily contact with the guidance counselors, nurses, deans and teachers to support students in need. Our social workers also engage in wellness programming for our student body

at large, in the hopes of raising awareness around mental health issues and decreasing the stigma associated with asking for help.

Future Configuration

With roughly 32 percent more students in the school, we can anticipate a similar growth in the need for Harbor and Shortstop programming. We anticipate a need for a suite with 2 Social Worker offices, 2 full size classrooms, and a quiet/small group room for up to 10 students. While we would like to consolidate these spaces adjacent to the Library Learning Commons, the Testing Center, and the Learning Center, we also want spaces that can provide discreet access and quiet space for students. The program would make use of the Special Education Alternative Physical Education Space for PE.

Special Education Department Suite

The Special Education Department also includes a number of specialists and supervisory roles, requiring a Special Education Department Suite. These professionals are currently housed in office spaces around the building. The department suite will house the Special Education Coordinator, Team Chair, 2 School Psychologists, a Speech Language Pathologist, and itinerant related service providers. Itinerant related service providers currently have no dedicated space and are accommodated in confidential offices and other appropriate spaces. Related service providers include: Occupational Therapist, Physical Therapist, Teacher of the Visually Impaired, Orientation & Mobility Specialist, BCBA, and Teacher of the Deaf and Hard of Hearing.

Future *Configuration*

Each of these staff will need spaces to work 1:1 or with small groups of students and to store their personal possessions while in the building. The department also needs two conference rooms for IEP Team meetings of up to 15 people. We envision these offices to be located adjacent to the Library Learning Commons, Guidance, and Specialized Programs, in order to provide interaction and collaboration opportunities. The goal is to emphasize physically and programmatically that specialized instruction and student support are central and easily accessed, rather than peripheral to the high school program and mission.

Special Education Alternative Physical Education Space

Currently, our Special Education programs are able to make use of our larger PE spaces, the Pit, and the LABBB program has a physical education classroom. With the reduction of PE spaces and improvement of the building, there will be a need for a dedicated Physical Education space for some of our special education population. Summit, Mill Brook, Harbor, Reach, Compass, and the LABBB program all have need for separate physical education classes. In addition, the Physical Therapist and Occupational Therapists serving these students have need of a gym space. With our Physical Education spaces used at full capacity, and these programs using 6 or more of the 7 periods in our schedule, we plan for a 3,000 sf Special Education Alternative Physical Education Space.

Early Childhood Special Education Program

Menotomy Preschool (MPS) is an integrated early childhood program for students ages 3-5 years old, operated by the Department of Special Education of the Arlington Public Schools. MPS provides an inclusive preschool experience for children with and without disabilities in a developmentally appropriate program and integrated service delivery model. Students receiving special education services learn alongside general education community students. Specialists and therapy are integrated into classroom instruction for all students. High school students enrolled in the AHS Child Development program volunteer in classrooms for hands-on practical experiences. MPS also provides “drop-in” special education services to eligible students.

The program currently has 6 classrooms and we will be adding an additional classroom next school year due to growing enrollment. There are 2 Speech & Language Pathologists, a Social Worker, an Occupational Therapist, Physical Therapist, School Nurse, Lead Teacher, Preschool Director/Principal, and an Administrative Assistant who provide direct services to students and/or support services to the program. There are also itinerant staff (Teacher of the Deaf and Hard of Hearing, Teacher of the Visually Impaired, Orientation & Mobility Specialist, School Psychologist, and Board-Certified Behavior Analyst) who provide services, instruction, and perform evaluations.

The current program space was not designed for this age group or program and was instead “retro-fitted” to meet the needs of this specific group. The itinerant staff listed above do not currently have any assigned work space and utilize hallways and “extra desks” to deliver services and conduct evaluations.

There is currently no meeting or conference room space for the Individualized Education Program (IEP) meetings with families and providers that are scheduled weekly. There is currently no main office or area to supervise the entry into the building or greet families/visitors; instead, they enter through a stairwell exit.

Future Configuration

A separate welcoming entrance with a main office area is needed. The main office area should include a private office for the director/principal, as well as a dedicated area for the administrative assistant and school nurse. A parent motor vehicle drop-off area to ensure student safety is also required.

We are currently offering programming in 6 classrooms. The preschool serves 147 students in a variety of services. State requirements require that classrooms be less than 50% special education, with a maximum of 7 special education students per room. Our trends show increasing enrollments as well as increasing requests for services. Below are our current enrollment trends in the full- and half-day programs. To support these trends, we envision a need for 9 classrooms to accommodate this state-mandated programming.

	June 2013	June 2014	June 2015	June 2016	June 2017	January 2018
Total Enrollment	68	66	75	72	95	93
Sped placement	40	32	49	41	54	54

We are requesting private offices for the Social Worker and School Psychologist, given the confidential nature of the work they do, and a shared office space/small group for the remaining itinerants to use when scheduled to be in the program. In addition to the existing spaces, we are looking to create a multi-purpose room for physical therapy, physical education, and whole preschool gatherings. Because of the number of observations and evaluations conducted by the program, we request a small group testing/observation area with viewing capabilities.

LABBB Collaborative Program at Arlington High School

The LABBB (Lexington, Arlington, Burlington, Bedford, Belmont) Collaborative Program at Arlington High School educates students who present with intensive cognitive, behavioral, social/emotional, and neurological impairments. The mission of the LABBB Collaborative at AHS is “to design and deliver special education services that promote academic, social and career independence in the most inclusive setting possible”. LABBB provides specially designed instruction to address the individual academic, social, emotional, and behavioral needs of our students.

LABBB curriculum focuses on functional academics and is based upon the principles of Applied Behavioral Analysis (ABA). The curriculum is highly individualized, delivered most often in small groups, with social-communication skills woven throughout. The program focus remains on students generalizing these acquired skills into social settings, the community, and their vocational training environments.

Currently, the LABBB AHS program serves 21 students across 3 classrooms. In general, we try to maintain a class size of 8 to 10 due to the intensity of needs as well as the level of individual/small group instruction that is required. Each classroom is led by a special educator and several teaching assistants. Additionally, LABBB has its own school nurse, Board Certified Behavior Analyst (BCBA), Speech and Language Pathologist, Occupational Therapist and Transition Specialist.

In addition to the 3 classrooms, LABBB AHS has 2 dedicated rooms: an Occupational Therapy/Sensory Room and a Multi-Purpose Room. The Occupational Therapy Room provides a space to receive therapy and to separate students from the group when they become dysregulated. The Multi-Purpose Room is a large flexible space that has been repurposed to provide a nursing station, a working kitchen for life skills instruction, a shared office space used by our Speech and Language Pathologist, Occupational Therapist, BCBA, and for team meetings, and, finally, a “think and return”/cool down area for students are experiencing an intense behavioral moment.

Future Configuration

The LABBB AHS Program currently has 5 instructional spaces and will be seeking to maintain the functions present in these 5 spaces. Specifically, we request space for:

- 3 Classrooms and Quiet Rooms
- Occupational Therapy/Physical Therapy Room
- Nursing Station
- Kitchen/Multi-Purpose Commons
- Team Office Space

The Library Learning Commons

The Library Media Center at Arlington High School serves many of the purposes of a Learning Commons but is constrained by small and poorly laid out spaces. In the period since the last major renovations in 1981, the space has been carved up to address a variety of needs. However, creativity and innovation have made the existing space a hub for information, literacy, collaboration, projects, and technology. The Library is the heart of the school, with space, resources, and services to support the intellectual and social life of AHS. Its mission is to empower students to be critical thinkers, enthusiastic readers, skillful researchers, and ethical users of information.

Now and in the future, we envision:

- Multi-use spaces that support a wide range of simultaneous learning activities
- Student-centered, accessible, flexible environment with comfortable seating, social/quiet zones, display space, and student involvement
- Print, online, media, and tech resources that support research, reading, and making

The Library is a point of pride for the entire school community, not a single academic program but rather the nexus of many. It is a school, district, and community resource, and showcases a commitment to and love of learning. The atmosphere is flexible, open, and inclusive. Currently the Library is the most visited and used classroom in the building. It is a social as well as an academic destination, serving well over 500 students daily before, during, and after school. Current space does not meet current demand, particularly for silent and semi-private small group study. When classes are booked in the library, the seating capacity for individual students is further reduced.

While it is primarily responsive to the interests, experiences, and needs of our students, the Library serves diverse stakeholders including teachers, classes, clubs, professional development, community education, district and external programs, and more. The Library has a class set of Chromebooks (30) and iPads (30), as well as smaller numbers of devices (16 Chromebooks and 10 iPads, plus 5 additional Chromebooks used to manage attendance) for individual checkout.

Currently, the Library can host up to 3 classes at a time depending on need. The primary instructional space is a large area open to the main Library with large-scale projection and sound, flexible tables/seating, and mobile technology, seating up to 100 when all tables are removed. It is used by individual students and small groups throughout the day when classes are not in session. This space is centrally located and accessible, which makes teaching and learning visible and promotes supervision, but also poses challenges for noise during instructional time. The Library can also host a class in the stationary desktop area by the front door, the connected computer lab, and smaller classes meet using the cafe style seating for book selection or a change of scenery. In the current facility, poor sight lines and excessive exits/entrances pose challenges for supervising students and securing materials.

The current and future Library is no longer a silent repository of books. In addition to a large group collaborative/social space with traditional work tables, the Library offers students a variety of spaces to meet diverse needs, including smaller cafe style seating with high top tables/stools and comfortable arm chairs. And yet, our experience has shown that even as collaborative and social learning has taken off (or perhaps even because of it), there is still a need throughout the day for many students to find a quiet moment and space to sit and reflect, study, or concentrate, and our current silent study area in the book stacks is too small to meet that demand.

The Library currently houses one group study room, which is used throughout the day by up to 10 students working independently, small classes or groups, tutoring, meeting space, etc. As project-based and personalized learning continues to grow, so will the need for additional technology-enabled small breakout rooms.

The Library has a small professional print collection and a Production Room with traditional equipment, such as photocopiers and a laminator, to which new fabrication technology has been added, such as a 3D printer and vinyl cutter, as well as materials and hands-on activities for students to make things throughout the day, serving academic, extracurricular, as well as social-emotional learning and mental health needs.

The current Library is open from 7:30am to 4:00pm daily. School administration makes an effort to avoid scheduling meetings, testing, and other conflicts that would reduce accessibility for student use, which has in turn created a sense of ownership and increased use by students. The Library is currently staffed by one professional library teacher and one paraprofessional with teachers supervising the space after school hours for an hourly stipend. The current capacity for books is approximately 1,500 linear feet, with additional shelving for storage. Students at Arlington High School continue to show a strong preference for print, especially for fiction and leisure reading (in the future nonfiction shelving needs may shrink, but we are already over capacity for our fiction and graphic novel shelving) so shelving needs are unlikely to change significantly.

The Library also houses our Learning Center. The Learning Center provides drop-in academic support for students before, during, and after school. Learning Center teachers work with students clarifying assignments, reviewing content material, structuring and editing essays, supporting ELL students' language development, assisting with college and scholarship applications, and improving study habits and organizational skills. The center is a quiet, structured learning environment where students can work together or independently to complete their assignments. Helping students further develop their executive functioning skills is a major focus of the program. Students are expected to bring materials and assignments to class and remain on task. National Honor Society peer tutors are also available to provide additional support. Students can be scheduled into the Learning Center or drop-in during free periods or after school.

Old Hall is the original, 100-year-old, auditorium space in the high school. While not currently part of the Library Media Center, its uses will need to be accommodated in the Library Learning Commons. Old Hall is currently used as a multipurpose room with a stage and large projection

wall. The space currently serves 2 particular functions that we will want to retain in the new building space.

AHS does not currently use substitute teachers for most classes, instead students sign in to Old Hall and retrieve assignments. Students have work tables and access to computers. In the new building we will need space to accommodate as many as 150 students for quiet work. We imagine that the new Cafeteria, Library Learning Commons, Senior Lounge, and adjacent spaces will be able to accommodate these students without overwhelming other programming.

Old Hall is also used as a lecture and collaboration hall for large student meetings and staff professional development. We often hold events in multiple spaces at the same time. It is the site of collaborative staff meetings and student debates. While the Discourse Lab (see Vocational Education Programs) will serve this purpose for some smaller meetings, Old Hall is able to hold an entire school grade level, as well as the entire staff of roughly 140 for collaborative work.

Future Configuration

Whereas the traditional Library Media Center was originally designed with book storage, teacher-directed instruction, and silent study in mind, the Library Learning Commons of the future takes a student-centered, participatory approach. Teaching and learning are made visible to all with the use of natural light, glass, and multiple activity zones to support teaching, collaborating, socializing, and creating. Furnishings should be adaptable, flexible, and modular to allow for reconfiguring spaces as needs change. Comfortable and varied seating, movable shelving that promotes sight lines and maximizes usable floor space, ample outlets, student display space are all integrated into the plan. The Library Learning Commons showcases collaboration, agency, and connectivity, while also including areas for independent study, quiet reflection, and reading, as both are necessary components of a 21st century education. It is an incubator for new ideas and discovery, promoting inquiry, exploration, and creation; among staff it supports supporting collegiality, collaboration, and resource sharing between departments. It remains centrally located and accessible, the revitalized heart and hub of the new Arlington High School.

Of the 7,520 sf currently included in the Library Media Center, roughly 1,000 sf are hallway and passage space. This space is used for tall perimeter shelving, closed storage, student seating, display space, and acoustic separation. Based on the uses we intend for this space and its importance in our educational vision we considered a number of standards to calculate the appropriate space for the Library Learning Commons., See the attached Library Learning Commons Needs Assessment for more detail (Attachment 3). With a 32% increase in enrollment projected for the target of 1,755, our 7,520 sf space would need to expand to 9,926 sf. With our projected 39% by 2027, the corresponding increase would be 10,077 sf. Given that the space is too small, we propose a Library Learning Commons space of 10,500 sf. This will help us to accommodate multiple classes with room for personalized learning, projects, independent study, and work during unassigned time. This larger space will be necessary to absorb some of the functions of Old Hall, as a large study space and meeting space for large groups (up to 450 students).

As Bring Your Own Device (BYOD) is growing, the use of devices, chargers, as well as recording equipment, like microphones and tripods, and related technology is increasing rapidly; the new Library will continue to have significant need for secure storage and charging capabilities. It should also continue to house traditional areas such as a library workroom for processing materials, a secure librarian's office (which is currently too far from the main area), and a teacher work and/or break area (sink, refrigerator) to promote interdisciplinary collegiality and collaboration.

The uses of a clean makerspace are expanding rapidly, pointing to the need for a Smart Center and additional support staff in the new building that can house traditional and emerging fabrication technology (e.g., poster printer, robotics kits, etc.) where it is accessible to all students and teachers throughout the day. (See Vocational Education Programs.)

Ideally, the Learning Center would have a room large enough to accommodate 25 work carrels, a team work table, and a teacher desk. As mentioned above, adjacencies to the other academic support programs located near the Library Learning Commons would be desirable.

The adjacencies and program spaces described throughout this document place the Library Learning Commons at the center of most academic support services, allowing collaboration and creative uses of space. Students in Reach, Harbor, Shortstop, Academic Support, the Testing Room, and the Learning Center could move easily between programs. Guidance and Main Office would be easily reached and could use the spaces. The Library Learning Commons would be the primary destination of students seeking support. Staff would also find a one-stop shop for resource sharing, interdisciplinary collaboration, and support.

Instructional Technology

Arlington has been steadily expanding our use, access, and expertise in the use of instructional technology. Technology includes the range of digital information technology, digital fabrication tools, and traditional tools. Technology is transforming our ability to differentiate instruction, ability to engage students, ability to produce work, the nature of communication, and our ability to connect to learning beyond the school. Arlington believes in a style of learning that acknowledges that technology is always with us, so our new building must provide an environment that creates rich, flexible access to technology.

In spite of our aging facility, we have been expanding access to computers. Teachers have access to laptops, projection, connectivity, and, increasingly robust network access. We have adopted a BYOD policy to encourage students to bring Chromebooks and laptops to supplement our school-provided classroom Chromebooks. At this point, there are roughly 100-120 devices per department, with a total of roughly 900 student devices. These are a mix of different generation devices. We have most recently focused on Chromebooks, with some departments using special carts (or tubs) of devices for particular purposes. Through grants we have piloted 1:1 classroom teaching in 9 classrooms, with more accessing the technology. Specialty carts, such as iPads for languages and laptops with science probes, have been obtained through grants as well. Staff have had extensive training as well.

The result has been a rapid implementation of instructional technology and innovation among teachers and departments. All teachers make at least basic use of Google Apps for Education and Google Classroom. Most have moved their assignments, homework, and feedback largely online. As we distribute more classroom devices and see higher levels of BYOD, we have been transitioning one of our 2 legacy computer labs to the Library Makerspace (Smart Center). The spaces are still used by departments to supplement their mobile computing and to have better spaces for computer-based work with their classes.

As we move toward 1:1 computing in classrooms, we find a greater emphasis on specialized computer labs to achieve higher level goals. The future goals are listed below under Vocational Education Programs.

Future Configuration

In the future, we envision fully wired classrooms with easy connectivity, interactive projection, robust Wi-Fi, and sound. Teachers need to have easy access to classroom devices to allow for 1:1 instruction. Classroom devices require easy storage, access, and charging. For advisory and communications, we want the ability to broadcast video to all classrooms. Student BYOD devices also call for robust Wi-Fi and furnishings that support the management of multiple devices.

We believe that AHS is ready to go beyond 1 to 1 meaning:

- Students often use more than one device
- A vastly robust and reliable wireless infrastructure

- Mobile and flexible access to technology
- Adaptable and flexible learning spaces
- A variety of devices for a variety of purposes

The value of information technology in developing citizens and learners is central in a digital age. Students must leverage existing and emerging technologies to thrive in the 21st century.

Vocational Education Programs

Arlington supports a wide range of hands-on learning programs and resources. In addition to their use in vocational training, these labs and workshops allow all students to extend their academic learning beyond the page. Thinking in education about STEAM, project-based, making, design thinking, and community-based education has risen as a response to the need to prepare young people with the skills to be creators of technology and culture and not simply consumers. Work on teaching problem solving and thinking skills for effective application of STEAM education has led to the concept of Design Thinking. Design Thinking encourages students to think deeply about a problem and to work collaboratively across disciplines to arrive at the best possible solution. The programs and facilities discussed in this section have been mentioned in other departments but are grouped here for clarity and development.

Each of these program spaces currently houses different types of equipment. Poor adjacencies limit access to sharing, so we have redundancies in a few pieces of equipment, particularly the 3D printers. As noted below, each of these spaces is designed for different purposes and hosts different tools and staffing. With better adjacencies we would be able to access and share equipment for different purposes. For example, the CADD lab would use the printers, plotter, and cutters in the Makerspace woodshop and engineering room, rather than maintaining their own equipment.

Interdisciplinary Makerspace.
In the design for the building many makerspaces should be distributed throughout the building. The Interdisciplinary Makerspace is a central facility that houses the most advanced tools and spaces for making. A maker community can best thrive with facilities that nurture its growth. The makerspace is a “library”, a shared resource center for building things.

Our current Makerspace is housed in the old Vocational Woodshop. It comprises the Woodshop, Wood Storage, Engineering Room, Project Room, Spray Booth, and storage spaces. It is staffed by a Makerspace Teacher who teaches 2 classes and keeps the facility open during the day. The space is constantly in use, hosting classes from all the disciplines. In the past month, Physics, Engineering, Social Studies, Sculpture, and other courses have used the space for units. In addition, students use the space for individual and group projects from other classes. As with other programs, repurposed spaces, aging facilities, and poor adjacencies challenge our creativity. We have 3D printers, CNC laser cutter, vinyl cutter, digital engraver, plotter, photographic printer, and other digital tools housed where we can throughout the building. The Maker Teacher also oversees the STEAM Design Thinking Certificate program. To earn the certificate, students develop an interdisciplinary portfolio based on coursework, extracurricular projects, and an independent capstone.

The Makerspace is currently supervised by a full-time Makerspace Teacher with certification and training in art, engineering, computer science, and industrial arts. This space houses the tools with the most significant safety concerns and can only be used with the supervision of trained staff with appropriate certification. Students or staff using any of the equipment undergo safety training in order to be approved on each device.

Future Configuration

The future facility would include both traditional tools for woodworking, metal work, and finishing, as well as state of the art digital tools, with proximity to the CADD Lab. The space would include 2,000 sf for an open workshop for heavy tools (listed as Makerspace - wood and metal shop with hand and digital tools) and 2,000 sf Engineering Project Room for assembling projects and housing digital tools (e.g., CNC laser cutter, 3D printing, and plotter). The adjacent CADD Lab should have sight lines as well as easy connections to the tools and space. Ideally, the Makerspace would be easily accessed by most programs. Art and Science are its most natural neighbors and users. In addition, the program would benefit from easy access for bringing large projects and supplies in and out as well as easy access for large set pieces from the Makerspace to the theater. Last, adjacency to the Envirogarden (See Outdoor Spaces) will also facilitate outdoor programming.

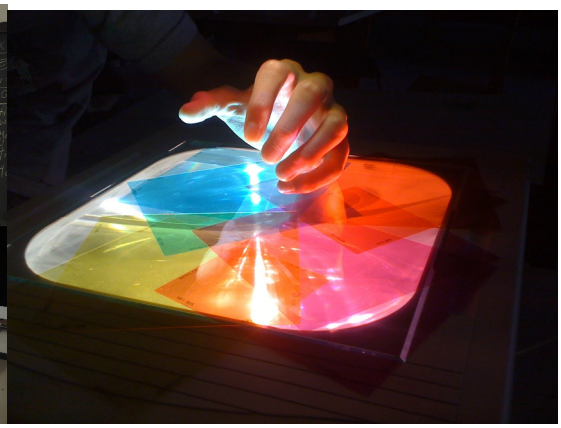
The future facility would continue to be supervised by an appropriately certified teacher. With the expansion of the facility and use, we envision that the teaching staffing would expand to allow for more classes to be taught in the Maker Suite while still keeping the space open for outside class use.

CADD Lab (Digital Design Lab near the Makerspace).
The current CADD Lab is currently sharing space with our Digital Arts Lab, because of space and wiring constraints. The current Lab is far from the woodshop Makerspace. The 3D printer, plotter, engraver, and other tools there are in constant use for students in the classes and on extracurricular or class projects. The program teaches computer design, as well as making, creating items such as drones, robots, maps, and assorted models. This lab would be adjacent to the new Makerspace, as it will be the program that directly runs the digital design software used on many of the tools.


The current CADD Lab is sharing space with our Digital Arts Lab. The space is alternately supervised by a certified CADD teacher and a certified Art teacher, each with expertise in their field. In the new building, this lab would be part of the Makerspace Suite and supervised by both the CADD teacher and Makerspace teachers. Use of the equipment in the Makerspace would be covered by the safety training noted above.

Digital Arts Lab (near Visual Art).
The current Digital Arts Lab shares space with the CADD Lab. The digital media computers focus on digital photography, video, and printmaking. The digital printer and large display, multimedia computers are cramped in the current space, so some have been located in the teacher office between the art rooms to create a mini-lab. This lab would be adjacent to the Visual Arts Department.

The current Digital Arts Lab is sharing space with our CADD Lab. The space is alternately supervised by a certified Art teacher and a certified CADD teacher and, each with expertise in their field. In the new building, this lab would be adjacent to the Fine Arts Department. It would include state-of-the-art graphic design computers and photographic printers. The space would be supervised by the Digital Arts Teacher and use of the space would be allowed only with supervision by staff trained to use the equipment.



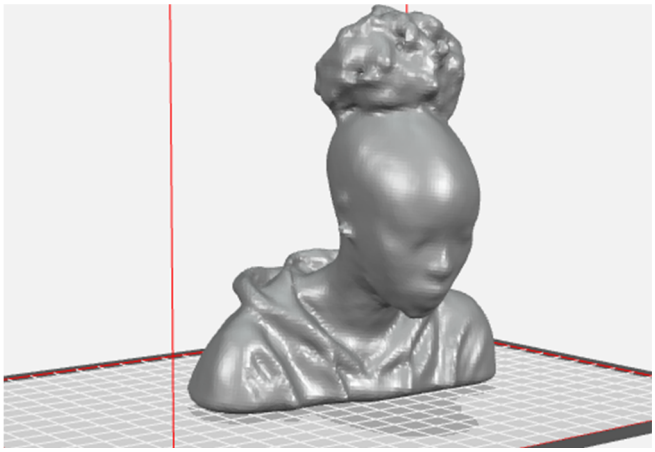
Digital Production Lab and Production Studio (near Performing Arts).
Our current Digital Production Lab hosts classes in music composition, scoring, creation, and performance. Computers and digital instruments currently support classes of up to 20 and we have supplemented with student devices and peripherals to accommodate up to 27. The music room also has a production lab allowing recording and production of video. Currently other courses use the studio for recordings and small video productions. The future lab would be adjacent to and digitally connected to the Performing Arts Facilities and house classes up to 25 with spaces for keyboards, instrument storage, and full production studio, allowing for classes and interdisciplinary production work.

The current Digital Production Lab is supervised by a certified Music Technology Teacher. The Production Lab and Production Studio would be supervised by the Music Technology Teacher and use of the space would be allowed only with supervision by staff trained to use the equipment.

STEM Computer Lab (near Math and Science).
The STEM Computer Science Lab is currently located near the Mathematics Department. Originally grant-funded to support up to 25 students, it is currently used at 100% capacity for a range of computer science classes, including Introduction to Computer Science, 2 AP computer science courses, and a number of advanced programming classes. The future facility would be located similarly near to the Mathematics Department.

The current STEM Computer Science Lab is used at 100% capacity under the supervision of certified teachers of Computer Science. We envision the program growing and use of the space would be allowed only with supervision by staff trained to use the equipment.

Smart Center (Library Makerspace).
As noted above, our current Library has been creatively making digital production available to staff and students connected to the computer classrooms and teacher work room. We currently house a 3D printer, vinyl cutter, laminator, printer, and 2 copier scanners. Two professional staff, a Librarian and Technology Integrator, assist staff and students with integrating these production tools to create higher quality materials and projects. Combined with the Library's constantly updating instructional technology (Chromebooks, iPads, peripherals, etc.), this Library Makerspace supports communication, engagement, and creativity. With state of the art facilities, we envision a Smart Center adjacent to the Library Learning Commons. This space will provide printing and production resources to staff and students including facilities such as high-speed printing, binding, laminating, sign making, 3D printing, laser cutter, vinyl cutter. Student interns can work with the Technology Integrator to support teachers, students, and groups using this facility for various projects.



The Smart Center would primarily focus on printing and production resources for teachers and students such as high-speed copying, binding, poster printing, vinyl cutter, laminator. The space currently includes a 3D printer to increase access and visibility of that technology. The space could likely also be used to support tinkering activities connected to other maker spaces. Our library often keeps a small supply of materials that may be used elsewhere, in order to facilitate student work. As some making tools come into higher levels of use and lower cost, it's possible we would add some of those to the Smart Center (e.g., 3D printer, laser cutter). Supervised by our Librarian and Technology Integrator, the space would ideally be staffed by a trained paraprofessional and student interns.

Language Multimedia Lab (near World Language).
As mentioned above, the current Language Lab is now dated, with traditional computer language stations. The "new" Language Multimedia space would take advantage of the immersive, connecting, and engaging power of technology. The lab would support one-on-one teaching and learning, testing, presentations, language immersion, virtual reality, communications, hosting exchange students/gatherings (30-40 students), performances, and

productions. In addition to digital technology, we envision a space that would include a kitchenette and flexible furnishings to support immersive experiences. This space will engender unique teaching and learning opportunities, just like each of the vocational/technology labs proposed and will provide opportunities to be used by all departments as programming continually evolves. The space would be supervised by the Language Department Head and available by sign-out to certified Language Teachers and trained teachers.

Discourse Lab.
As mentioned above in discussions of English, History, the Library Learning Commons, and Old Hall, we envision the need for an interdisciplinary center to support scholarly discourse. Located adjacent to the English and History departments, this space will allow for connection, interaction, and collaboration. The space should accommodate up to 120, to allow for up to 5 classes, and will support multiple class presentations, debates, discussions, and professional development workshops.

Family and Consumer Sciences (FACS).
FACS is discussed more extensively under our educational program. FACS will continue with 2 Culinary Labs, the Interior Fashion Design Classroom, and the Early Childhood Education (ECE) Program.

Life Skills Cafe and Store.
This space is listed under Special Education; it is designed for training in life skills, job transition skills, and social interaction skills for students in our Reach and Compass Programs.

Lunch Programs

The cafeteria currently seats 375 students and is located in the center of the building, becoming its symbolic heart; a location for lunch, breakfast, classes in need of break-out spaces, a study space, homework area for all the students, and site for larger events.

With a population of 1,328, divided into 3 lunches, the cafeteria is able to serve roughly 440 students per lunch. You will note, this is 65 more students than there is designed seating. The staff are able to provide nutritious and filling lunches in line with state and federal standards through a single on-site kitchen, 1 walk-in freezer, a dry storage room and preparation area (with several smaller fridges for fruit, vegetables etc.). In times of need (for example, a kitchen goes down at an elementary school), this space doubles as a district kitchen.

Several problems arise from the central location of the cafeteria. All deliveries must travel half the distance of the building through a series of ramps and rooms. The central location leads students to congregate, and since the space is located adjacent to several classrooms, socializing students lead to noise issues and disruption.

Future Configuration

For our food service, we will need a cafeteria and kitchen area that can serve the school in at least 3 lunch periods. That means seating and serving capacity for 585-616. Overflow spaces that could accommodate the school in 2 seatings would have a significant positive impact on scheduling, eliminating the need to split some classes.

We envision a Cafeteria that is able to serve a number of purposes beyond feeding students and staff. The space will encourage and educate students in healthy eating habits. It will provide a central location for student interaction and socialization and should include a variety of settings for students with different social needs (quiet spaces, large spaces). We imagine 500 sf of space set off as a Senior Lounge to allow upper level students some separation and responsibility. The Staff Cafeteria space will support staff interaction and may serve as a location for our Culinary program to expand its vocational food service training.

During the day, the Cafeteria will serve as an integral part of our Learning Commons, providing study and break-out spaces for students. The Life Skills Cafe and Store will create community and opportunities for positive social interaction for students in our Reach and Compass Programs. Furnishings, divisions, and sight lines to provide good working spaces and easy supervision will help make this a more usable space.

As noted, the Cafeteria will also serve as a gathering space for advisories and professional development. It should be able to accommodate assemblies of one grade level (roughly 450 students) and large collaborative activities such as staff meetings. Multiple uses will require flexible furniture, good acoustics, technology, and open spaces.

Transportation Policies

Almost all students self-transport to school by walking, cycling, public transportation, or are dropped off by car. The High School is located on a major roadway with several bus lines and abuts a bike path that extends throughout the town into neighboring communities. Transportation is provided for students participating in the Metropolitan Council for Education Opportunity (METCO); a bus transports the students to and from Boston, and students receive a Charlie Card for public transportation. Some students periodically have mobility impairments that require specialized transportation provided by the district. An accessible drop-off would benefit those students, as well as students attending the LABBB program.

A majority of our staff drive to the building. With parking limitations, we are not able to guarantee all staff parking.

Additional programs in the building provide varying degrees of transportation. The LABBB program provides bus services for students, while the preschool is mostly a parent drop-off program

Future Configuration

The building will require additional plans regarding transportation as both the staff and student body grow in the coming years. Additional parking spots (on school grounds) for both would enable staff to walk less than a quarter of a mile to school after finding parking, alleviate pressure in the neighborhoods from students parking throughout them, and allow sufficient parking spaces for visitors.

A better-designed system of roads around the building would enable smoother pick-up and drop-off of all students (preschool, LABBB school students, daycare, etc.) and ensure that fire lanes are not choked with cars and bicycles. In addition, the large number of vans and buses for field trips and athletics would be able to enter and exit the area. Currently, some vans and buses become trapped in a system not designed to handle larger vehicles.

For students walking and bicycling to school, a direct link to the bicycle path would ensure students a safe passage free of morning and afternoon commuting traffic. Students also need safe, well lit, and monitored routes for leaving when it becomes darker. Improved walking routes would also provide access from the back to the front of the school on both sides of the building. Currently, it is not possible to walk past the school on one side of the building.

Public transportation access, though on the street and not part of this project, would be improved during colder or rainier weather by a waiting station on school grounds.

Key Programmatic Adjacencies and Relationships

The overall vision for the school is to place a Commons at its heart, comprising the Library Learning Commons, Cafeteria, conference rooms, and overflow spaces. A host of support programs would be located around this Commons, in order to provide easy access and collaboration for both students and staff. The Makerspace will also be located as centrally as possible with primary adjacencies going to its most likely collaborators in the STEAM disciplines. In addition, specialized making resources (labs, breakout spaces, storage, and display) will be located adjacent to each department.

These relationships have been addressed throughout the document in the sections marked "*Future Configuration*". *The AHS Adjacency Diagram* (in Appendix J of the Preliminary Design Program report) gives an overview of the main spatial relationships.

Security and Visual Access Requirements

Arlington considers security to be our ability to maintain a sense of safety, to safely monitor students, to secure the school during the school day, to secure school events, and to secure the building after school hours.

Unfortunately, schools have become targets for those who wish to instill terror and injure others. In order to create a safe and secure learning environment, where students and staff do not worry about this stress and can focus on academics, we are looking for updates to many of our security systems. As you will see, we have inadequate systems to achieve this, but we also understand that security is best achieved through relationships and our knowledge of the students and community.

Currently, access and activities in the building are very difficult to fully monitor. There are 25 separate entrances/exits in the building, 68 individual doors, and a mile and half of stairwells and hallways. The doors are not heavy duty, high security doors. They do not hold up to regular use. The building is monitored through the use of 28 closed-circuit cameras, and staff who walk the building. Closed-circuit cameras are not positioned to monitor all the access points into the building. To supplement the closed-circuit system, we have portable cameras that can be set up for short periods of times. Given the difficult sightlines of the building and isolated hallways and stairways, there are large blind spots in the ability to monitor all areas of the building.

Upon entering the building, all visitors are directed to check in at the front desk, which is staffed from 9:00 am to 2:30 pm. When not staffed, all guests to the front door must be buzzed in to the main lobby and then walk to the Main Office. With a multitude of doors, this system is not always fully effective, leading to some guests entering the building through other doors and not checking in.

The building is also used during evenings and weekends for various school events, as well as for town events and by Arlington Community Education. The design of the building means that areas cannot be sectioned off properly. Any group who uses a portion of the building will have access to the entire building. Access problems are exacerbated by a key and lock system that is easily bypassed or copied. Thus, access to one door provides access to large locked areas.

This disconnect results from the multitude of additions to the buildings over the past century, each addition adding another level of difficulty when it comes to fully securing the space. For instance, the fire alarms are locally zoned to each building (3 in total), meaning if an alarm is triggered in A building, there is no alarm in C building. Likewise, the intercom system has been extended beyond capacity, leading to many shorts in the system and an inability to contact all areas of the building simultaneously or to ensure that staff can contact the main office properly.

Future Configuration

First among the requested updates is to create a series of contact alarmed doors and windows around the perimeter of the building that are all monitored by an HD camera system with both

live feed and playback options. The camera system would enable administration to observe all those entering and exiting the building and keep visual records. The main entrances should be secured by vestibules with bullet proof glass, video and intercom system for buzzing in guests, and a secure check-in area. We would like to add attendance control to our entrances, so that we can use IDs to easily sign students in and out of the building and into spaces like the Library or Study Hall. Attendance control could be used to both monitor students and support student agency through options such as senior privileges.

In addition, being able to section off areas of the building would enable different combinations of events to occur outside school hours while limiting access to other sections of the building. For instance, we would be able to hold a basketball game in our gymnasium, knowing that visitors are not wandering through classrooms. Cameras set to monitor internal hallways would ensure that if anyone did gain access, they could be tracked and identified.

We are also looking to have a fully integrated phone and intercom system where staff can contact the main office, reach parents, and broadcast announcements. In addition, we envision a comprehensive fire alarm and suppression system. For emergency communication, handheld VoIP phone/radios would allow administration and security staff to communicate inside and outside the building in an emergency.

Extracurricular Programs and Student Leadership

Arlington has worked to encourage student leadership and involvement through student government and club activities. The Student Council has representatives in each grade level and each grade level has Class Officers. Class Officers organize fundraising and events for their grade. The Student Council works with administration and students to promote the mission of creating safe, supportive, and inclusive school. AHS now boasts over 70 student clubs, focused on entertainment, study, service, identity, culture, athletic activities, politics, and more.

The list of current clubs can be found here: https://sites.google.com/a/arlington.k12.ma.us/ahs-clubs/

Future Configuration

In the new building, we hope to support these activities by making the Library Learning Commons available as a place for multiple meetings and planning, using break out spaces and meeting rooms that can be easily supervised. The Student Council/Club office would use the meeting space within the Library Learning Commons to serve as a hub for student activities, particularly the Newspaper and Yearbook.

Students have been working with Administration to create a Senior Lounge in the current building. We hope to utilize a 500 sf area in the new Cafeteria. We imagine a space to allow upper level students some separation from underclass students and a sense of responsibility.

Athletics

The Athletic Department serves student-athletes throughout 3 seasons each year - fall, winter and spring. On average, about 440 students participate each season. Facility usage and spectator attendance overlaps with school vacation, holiday, and weekend time, rendering storage and security a top priority in building design. The needs and demands of the 30 varsity programs sharing the same spaces require facilities that offer universal and transferrable spaces as well as sport-specific considerations.

We believe that through athletic experiences student-athletes enhance individual and collective growth during their high school careers. We strive to teach lessons that translate from the playing field to daily life. Through these experiences, players are poised to strengthen various aspects of their development through their resilience, dedication, communication, and teamwork. Involvement in the athletic program is a privilege and members should remain mindful of the strong history and roots of our Arlington community that allow for the current athletic experiences to be enjoyed.

The goals of our programming are to: 1) Develop skills, including; time-management, communication, commitment, resilience, work-ethic, teamwork, and sportsmanship. 2) Increase confidence, maintain physical and emotional fitness, expand skill sets, and build relationships. 3) Use the important platform of Educational-Athletics programming to unite community, build pride, connect with varying stakeholders, and reinforce district values and goals. 4) Seek to build relationships with youth, alumni, and other stakeholders.

Currently Athletics use the Red Gym, Blue Gym, and Pit Gym, and boys and girls locker rooms that are separate from the high school/PE locker rooms. Athletics has some equipment storage within the building, an athletic director's office, an athletic director's administrative assistant's office, and a trainer's room inclusive of 4 tables, ice machine, and clothes washer and dryer machines.

Future Configuration

In the future we envision:

- Two sets of locker rooms, one male and one female, that are shared with Physical Education. Team break-out rooms in the locker rooms, with a few private showers
- Coaches office space accessible to the locker room for security and supervision
- Gender neutral changing rooms.
- An Officials Changing Room that is easily accessible to the field and gym, and not connected to any locker room
- Storage for sports in small closets that can be rotated out seasonally, depending on who is in season
- A sound system in the large gymnasium with good acoustics
- Improved electronic configuration for wireless scoreboards and shot clocks to avoid the wires that currently run throughout the floor

- A space for wrestling to practice and compete after school hours comparable to the existing area, “The Pit”.
- Access to athletic spaces from the outside of the building and the ability to secure the school separately from athletic spaces (not open access to the rest of the building)
- The continued use and development of the Fitness Center
- Built in water fountains that can be used to fill water bottles
- Hand sanitizer dispensers
- Increased access to recycling totes and trash cans
- An athletic training room located near the gym and fields with a closet that holds water/ice, accessible from the hallway and the trainer’s office so that teams can access in off hours without going into the trainer’s office
- A flexible classroom space (shared space with PE) for CPR and First Aid training, Coaches Meetings, Coaches Professional Development, Team Meetings etc. Access to whiteboard and projector.
- Equipment and uniform storage space separate from the locker rooms (so both males and females can access)
- Ticket and concessions designed to be outside of the large gym - in an area that is heated, but is not in the gym/causing blockages
- Storage that can hold gymnastics equipment
- Seating in the smaller gym (Alt PE space) for events hosted
- Batting cage
- Athletic Director’s office with conference table for meetings or up to 10 people
- Athletic Administrative Assistant’s office with coaches’ mailboxes, and access to items needed during hours the school is closed (copy machine, fax machine, computer)
- Bathrooms that are accessible from the outside of the building to reduce the need to open the school
- Garage for trainer’s cart, and equipment
- Storage space for outdoor sports equipment (seasonally rotated) that can be accessed from the exterior of the building to reduce the need to open the school

Learning Beyond School Walls

In the 21st Century, economic change, technology, and shifts in higher education are changing the landscape of high school education. Arlington has been expanding our offerings and building our capacity to allow students to learn beyond the traditional classroom, varying how, when, where, and what they learn to serve their interests and needs. These efforts include uses of MOOCs (Massive Open Online Courses), interdisciplinary certificates, internships, online courses, BYOD (bring your own device), and an emphasis on maker culture. Spaces and resources to support this model of instruction are central to the vision of the Library Learning Commons.

AHS does not currently have much in the way of interdisciplinary courses. Instead, we are developing our ability to create interdisciplinary connections through programming that connects across courses and to opportunities outside of the classroom. Through two of the programs discussed below, MOOCs and Interdisciplinary Certificates, we are building communities of staff and students who are exploring content both beyond our classroom curriculum and connecting across disciplines. The teacher communities primarily come together in PLCs that develop and explore projects, resources, and activities that support their area. For example, the Design Thinking Certificate was the the outcome of our STEAM PLC, which combined teachers from science, instructional technology, engineering, art, and math. The Makerspace Teacher (a teacher with certification and training in art, engineering, computer science, and industrial arts) is a full-time teacher, but teaches only 2 sections. The remainder of his time is assigned to supervise the certificate program, develop interdisciplinary curriculum, work with classes in the Makerspace, and coordinate with other teachers. MOOCs are staffed by teachers who volunteer to take the course and are paid a stipend to supervise students and teachers who take the course with them. These classes take place outside of school hours. By studying together and outside of their content area, these classes have allowed staff to make interdisciplinary connections in terms of relationships and material. We believe that learning with is blended, flexible, interdisciplinary, and reaches beyond a traditional classroom can be effective and will be a growing part of the future of education. The vision of the Library Learning Commons as well as the emphasis on spaces for making reflects the desire for facilities and equipment to support further growth and experimentation in learning across and beyond the classrooms.

MOOCs (Massive Open Online Courses) are courses offered online and open to the public. Students learn the provided materials (lectures, readings, videos) and are assessed by online quizzes and peer feedback. While these programs provide good content, they have been limited in their success in creating consistent learning or effective assessment and feedback. Arlington has developed a highly successful blended model in which students or staff may propose a course. Students take the course along with a staff member who helps create context, community, appropriate feedback, and supplements and approves the assessment. Last year, over 150 students enrolled in MOOCs. This year, we are on track to double that number. Offerings include a broad list of titles including titles as diverse as: Quantum Mechanics and Astrophysics, Women's Rights and Women's Health, Mindfulness, Criminal Psychology, Food and Nutrition, Philosophy, History of the Middle East, Race and Diversity, and Electronic Music.

Interdisciplinary Certificates.
In order to recognize and encourage interdisciplinary learning, Arlington has been developing a program of interdisciplinary certificates. The Global Competence Certificate is now in its third year and this year we are launching a STEAM Design Thinking Certificate. The Global Competence Program (GCP) is designed to foster students' global awareness, and, in so doing, provide AHS graduates with the essential skills for participating in and contributing to an increasingly globalized society. The certificate combines course work, community service, a global engagement project, and foreign travel. The STEAM Design Thinking Certificate will foster the skills related to effectively applying their STEAM-based skills and knowledge. Students will apply brainstorming and problem-solving techniques to their project-based school work and document the process in a web-based portfolio. The program will culminate in an independent project solving a real-world problem. Going forward, we envision adding 1 or 2 additional certificates, likely focused on civic engagement or service. The interdisciplinary certificates combine school coursework, extracurricular activities, and (in some cases) independent study activities or community-based projects.

Academic Internships and Work Study.
Arlington is expanding offerings for students to engage in unpaid internships and paid work study options. For students interested in gaining job experience and challenging themselves in the workspace, internships allow seniors to pursue an area of interest in a community-based work situation. Students work at least 5 hours per week and participate in an end-of-term presentation of their learning.

Digital Language Courses.
Students who are interested in learning a language that is not currently offered at Arlington High School may enroll in online course through Brigham Young University Independent Study program. While primarily an independent study course, weekly participation in the online learning activities, supervision by a World Language teacher, and weekly mandatory meetings for the first quarter are required.

Outdoor Spaces

While Arlington High School experiences a number of site issues, the use of outdoor spaces is an important consideration. We currently have 2 courtyards that are used by students during lunch and free periods. In addition, our Envirogarden is used by many of our classes for experimentation, project-based learning, and demonstrations. Our current Envirogarden hosts a pond, a garden, hydroponics, an outdoor classroom, and other engineering experiments.
The front lawn of the high school is currently a green buffer between the high school and Mass Avenue and used by classes for discussions; these spaces are useful as classrooms, resources, makerspaces, and for student well-being.

Future Configuration

Our study, discussion, and visioning sessions emphasized the importance of sustainability and access to the outdoors as instructional tools, values, and important to social-emotional health. For this reason, we also want to consider our outdoor spaces and adjacencies as we draft this Educational Program for the new facility.

In particular, we are proposing a new Envirogarden designed for gardening, engineering, and biology experiments, and adjacent to the STEAM areas of the building. Mill Brook currently runs behind and under the building in a culvert but could be a science and landscape resource to the building if it were returned to a natural state. Outdoor spaces, like the current courtyards, could provide breakout spaces for students, access to nature, fresh air, and natural light. We hope to keep green space around the school and would like an outdoor amphitheater that could be used for outdoor classrooms, performances, and gatherings. A green roof envisioned for the building would provide outdoor space for teaching, relaxing, and social interaction.

Community Education

Arlington Community Education (ACE) is an educational partner that makes use of the school building during off hours to provide enrichment offerings to Arlington students and the community.

ACE uses the high school facilities from September through June for enrichment programming. In the last two years, all of our programs have seen significant growth. Due to increased enrollments, we now host classes for elementary and middle-aged children after school and in the early evenings and run school vacation programs in February and April. In the evenings, we run about 24 classes each, which includes our adult programs, college test prep classes, driver education, HiSet, and ELL tutoring. ACE has partnered with AHS is developing and promoting our LC Internship, community service, and work study opportunities. We are currently using classrooms, art rooms, the media center (and surrounding rooms), computer labs, woodshop, the Pit, culinary kitchens, Old Hall, the Fitness room, the cafeteria, teacher lunch rooms, and conference rooms.

Currently, the ACE offices are located in the high school building, which is not only convenient, but essential to the coordination and planning for classes. Their 6 employees make use of 2 small offices.

Future Configuration

We envision ongoing partnership with ACE as a community resource. In particular, with programming such as the HiSet, ELL tutoring, and internships, we have begun to provide remedial opportunities for our students. We are hoping to expand this partnership going forward. Educational recovery programs such as night school and summer school programming are in short supply regionally. We are working to develop these going forward.

ACE will require office space for 6-8 employees with storage for equipment used by our instructors and youth programs.

ACE will also help to create partnerships that will benefit from these planned facilities

- *Alternative PE space with mirrors and barres*
- *Fitness room with weights, treadmills, and other aerobic equipment*
- *Family and Consumer Science spaces*
- *Discourse Lab*
- *Makerspace*
- *Art rooms*
- *Music practice rooms*
- *Modern computer labs*
- *Small meeting rooms for ESL and other language classes*
- *Gymnasiums*
- *Increased parking*

ATTACHMENTS

School Improvement Plan – provided previously in PDP submission
Program of Studies – provided previously in PDP submission
Library Space Estimates – provided previously in PDP submission
AHS Adjacency Diagram (Appendix J in the PDP Report) – provided previously in PDP submission