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# Avon Grove High School Tour

November 9 and 10, 2016

# Agenda - November 9, 2016

1. Review Previous Meeting
2. Review 21st Century Learning Model
3. Review of Education Model (9-12)
4. Review of Enrollments and Building Capacity
5. Review of Building Evaluations from Feasibility Study
6. Tour of AGHS

# Agenda - November 10, 2016

1. Review Previous Meeting
2. Tour of AGHS
3. Debrief Tour(s)
4. Q and A
5. Next Meeting Announcement

# District Vision & Mission

## Vision

All Avon Grove students are well prepared to create their own futures.

## Mission

The purpose of the Avon Grove School District is to foster a learning environment for all students to be exceptionally well prepared to succeed and lead full and meaningful lives.

# District Strategic Goals

1. Increase learning opportunities for all.
1. Develop and implement a systems thinking approach.
1. Develop and establish a communications and community outreach plan.



“Strategy will never be implemented nor vision realized without collaboration and teamwork. Strategy doesn’t just happen. People working in teams make it happen.”



- Rachel Curtis & Elizabeth City

# **21st Century Educational Model - Overview**

# High School Educational Model - Program Overview

AGHS serves students in grades 9-12. Core instruction occurs in language arts, math, science, and social studies. Art, applied engineering, business, family and consumer science (FACS), music and world language (French, German, Italian and Spanish), physical education, and health comprise departments that supplement the core.

The curriculum for the educational program is built using the Understanding by Design (UbD) framework, with the goal that each student is prepared for success upon graduation, regardless of post-secondary plans or personal aspirations.

# High School Educational Model - Program Overview

Transformation in educational models to meet 21st century learning requires learning spaces that are flexible, collaborative-capable, and rich in technology. These are the same foundational aspects of post-secondary education and workplace experiences that should be available for all AGHS students.

AGHS should serve as the flagship for the educational program of AGSD and be a hub of activity and education for students and community members.

# High School Educational Model - Program Overview

High School Educational Model

# High School Educational Model - Educational Specifications

The specifications focus on the following areas of the building:

- **Teaching and Learning Environment** – General Education, Special Education, and Electives
- **Student Services** – Guidance and Related Services
- **Common, Multi-Purpose Spaces** – Cafeteria, Gymnasium, Library Media Center
- **General, Operational** – Kitchen, Building Systems (HVAC), Technology

# High School Educational Model - Educational Specifications

High School Educational Specifications

# Enrollment Analysis: November 2016

RESIDENT STUDENTS ENROLLED IN AVON GROVE SCHOOLS														
	KG	01	02	03	04	05	06	07	08	09	10	11	12	Total
Penn London Elementary	249	292	313	-	-	-	-	-	-	-	-	-	-	854
Avon Grove Intermediate	-	-	-	344	378	390	397	-	-	-	-	-	-	1,509
Fred S. Engle Middle School	-	-	-	-	-	-	-	418	400	-	-	-	-	818
Avon Grove High School	-	-	-	-	-	-	-	-	-	442	465	449	480	1,836
	249	292	313	344	378	390	397	418	400	442	465	449	480	5,017
ELEMENTARY TOTAL: 2,363							SECONDARY TOTAL: 2,654							

TECHNICAL COLLEGE HIGH SCHOOL														
	KG	01	02	03	04	05	06	07	08	09	10	11	12	Total
Technical College HS	-	-	-	-	-	-	-	-	-	-	96	84	103	283

Technical College HS is a part-time program. Students are counted in the overall AGHS enrollment.

RESIDENT STUDENTS ENROLLED IN OTHER SCHOOLS & FACILITIES														
	KG	01	02	03	04	05	06	07	08	09	10	11	12	Total
IU Placements	-	1	1	2	2	-	1	-	4	3	1	4	20	39
Approved Private Schools	-	-	-	-	-	-	-	-	-	1	-	-	1	2
Adjudicated	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Charter/Cyber Schools	127	102	115	79	62	73	58	51	47	40	29	28	30	841
Avon Grove Charter School	125	100	114	78	59	73	55	47	41	34	21	18	23	788
	127	103	116	81	64	73	59	51	51	44	30	32	51	882
ELEMENTARY TOTAL: 623							SECONDARY TOTAL: 259							

# Building Capacity: What Does this Mean?

- **PDE Capacity**

- **Department of Education (PDE)**

- High School:

- 25 students/classroom (90% utilization)

- **Functional Capacity**

- **Avon Grove High School**

- Calculated using 25 students/classroom 9-12, 20 for lab type spaces (recommended 80% utilization)

How the District utilizes all of its Educational Spaces determines the functional capacity...

AGHS Capacity  
Comparison:  
*taken from  
Feasibility  
Study 2015*

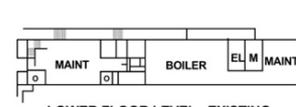
SCHOOL Avon Grove HS (9-12)					
PRESENT CAPACITY					
		PDE CAPACITY		AGSD CAPACITY	
#1	#2	#3	#4	#5	#6
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL
REG CLSRM 660+ SQ FT	25	32	800	32	800
CLASSROOM - MODULAR	0	12	0	12	300
UNDERSIZED CLSRM <660+ SQ FT	0	2		2	50
SPECIAL ED CLSRM	0	5		5	
SPECIAL ED RESOURCE - GIFTED	0	1		1	
SCIENCE CLSRM 660+ SQ FT	25	2	50	2	50
UNDERSIZED SCIENCE CLSRM <660+ SQ FT	0	4		4	100
SCIENCE LAB 660+ SQ FT	20	11	220	11	220
BUSINESS LAB 660+ SQ FT	20	6	120	6	120
COMPUTER LAB 660+ SQ FT	20	3	60	3	60
TV INSTRUCTIONAL STUDIO 660+ SQ FT	20	1	20	1	20
ART CLASSROOM 660+ SQ FT	20	2	40	2	40
ART CLASSROOM <660+ SQ FT	0	1		1	20
BAND ROOM 660+ SQ FT	25	1	25	1	25
CHORAL ROOM 660+ SQ FT	25	1	25	1	25
FAMILY/CONSMR SCIENCE 660+ SQ FT	20	3	60	3	60
IA/SHOP 1800+ SQ FT (WOOD OR MTL)	20	2	40	2	40
GYM 6500-7500 SQ FT	66	1.5	99	1.5	99
AUX GYM 2500 SQ FT (FITNESS RM)	33	1	33	1	33
AUX GYM <2500 SQ FT	0	1	0	1	33
OTHER: <b>AUDITORIUM</b>	0	1		1	
BUILDING TOTAL		100%	1592	XXXXXX	2,095
HS/SEC UTILIZATION (PDE-REIMBURSEMENT)		90%	1433		
HS/SEC UTILIZATION (RECOM. CEPPI FUNCTIONAL CAPACITY)		80%		XXXX	1,676
HS/SEC FUNCTIONAL CAPACITY WITHOUT SUBSTANDARD CLRMS		80%		XXXX	1,274

EXISTING GRADE ALIGNMENT	SCHOOL NAME	CURRENT ENROLLMENT	PDE CAPACITY			AGSD / CEFPI FUNCTIONAL CAPACITY		
			CAPACITY	+/- CAP	UTIL. FACTOR	CAPACITY	+/- CAP	UTIL. FACTOR
K-2	PENN LONDON ELEMENTARY	929	1025	96	91%	902	(27)	103%
3-6	AVON GROVE INTERMEDIATE	1513	1575	62	96%	1,488	(25)	102%
7-8	FRED S. ENGLE MIDDLE	858	854	(4)	100%	930	72	92%
9-12	AVON GROVE HIGH	1806	1433	(373)	126%	1,676	(130)	108%
	TOTAL	5106	4887	(219)	104%	4,996	(110)	102%

Comparison of Existing Capacities & Enrollments: *Note: Taken from Feasibility Study 2015*

# Building Evaluations

- **Building Information Summaries**
  - Summary of District-Owned Facilities
  - Building Profiles
- **District-wide Comparison**
  - Energy Performance
  - Capital Improvement Costs versus Renovation or Replacement Costs
  - Building Condition Rating System
- **Building and Site Assessment**
  - Energy Star Scorecard



LOWER FLOOR LEVEL - EXISTING



PARTIAL UPPER FLOOR LEVEL - EXISTING

**COLOR LEGEND**

- ART
- CLASSROOM
- FCS
- MUSIC
- PHYSICAL EDUCATION
- SCIENCE
- SPECIAL EDUCATION
- TECHNOLOGY EDUCATION

**GENERAL CLASSROOMS PDE CAPACITY**

1592 X 90% UTILIZATION = 1433

**AGSD CAPACITY (USING CEFPI UTIL)**

2095 X 80% UTILIZATION = 1676

**EXISTING CONDITIONS  
AVON GROVE HIGH SCHOOL  
GRADE 9 TO GRADE 12**

## Avon Grove School District Summary of District Owned Facilities

Building	Construction/ Renovation	Site Size	Grades	Building Square Footage	Building FTE PDE Capacity	Building FTE Avon Grove Capacity
Penn London ES	1992 B/ 2002 A	212 acres, shared with AGIS and DAO	K-2	106,500	1,025	902
Avon Grove Intermediate School	2002 B	212 acres, shared with PLES and DAO	3-6	210,000	1,575	1,488
Fred S Engle Middle School	1961 B/ 1970 R/ 1997 R/ 2009 A/ 2010 R	70.1 acres shared with AGHS	7-8	117,490	854	913
Avon Grove High School	1957 B/ 1995 R/ 1997 A/ 2008 R	70.1 acres shared with FSEMS	9-12	214,104	1,433	1,917
Avon Grove District Administration Offices	1991 B	212 acres shared with PLES and AGIS	N/A	9,600	N/A	N/A

## ● General

- Built in 1957; Additions in 1997, Renovations in 1995 and 2008
- Serves Grades 9-12; 214,104 square feet
- Current 2014-15 Enrollment
- Current Zoning
- General Site Description
- General Building Description

## ● Building Evaluation

- Program
- Accessibility & Building Code
- Physical Plant

Exterior Envelope, Interior Finishes, Environment Materials, Mechanical and Electrical Systems

# Avon Grove High School Evaluation Rating

Rating System: Excellent (4 points); Good (3 points); Fair (2 points); Poor (1 point); and Failing (0 points)

	Score	Remarks
<b>Architectural</b>		
Walls	3	Walls are in good condition, EIFS needs repairs at Auditorium
Roof	2	Roof needs recoating
Windows	2	Some windows have moisture trapped in insul glass
Doors	2	Interior doors good, exterior HM need painted
Casework	2	Casework varies from fair to good condition
Finishes	2	Finishes are in fair to good condition
ADA compliance	1	Many toilet rooms non ADA, various floor levels accessed by HC lift
Elevator	3	Building has elevator to access all levels, sized to hold stretcher
Security	1	Building has no secured vestibule entrance, entrance not clearly identifiable
<b>Sub-total:</b>	<b>18</b>	
<b>Structural</b>		
Roof construction	3	Roof structure is in good condition
Floor framing	3	Floor framing is in good condition
Structural integrity	3	Building structure is in good condition
Exterior walls	3	Exterior walls are in good condition with minor repairs necessary
Interior walls	4	Interior walls are sound and in very good condition
Lintels	3	Lintels are in good condition but should be repainted where exposed
Expansion joints	3	Building has appropriate expansion joints but should have sealant repaired
<b>Sub-total:</b>	<b>22</b>	

<b>Mechanical - HVAC</b>		
Boilers	3	Cleaver Brooks boilers are in good condition but are 18 years old
Chillers	2	Nearing the need of its useful life expectancy
Pumps	3	Duplex VFD pumps distribute hot water, pumps in good condition
HVAC Piping	3	HVAC piping is overall in good condition
Classroom HVAC units	2	Some units do not have adequate capacity for the loads
Air handling units	2	Some units do not have adequate capacity for the loads
Terminal heating equipment	2	Many units are damaged beyond repair
Fuel storage tank	2	Oil transfer system is in poor condition
Toilet room exhaust systems	2	Fans nearing the end of their normal life cycle
Kitchen exhaust hood	3	Kitchen exhaust provides necessary ventilation and has makeup air
Temperature control system	2	Not all of the components function properly. System needs upgraded.
Indoor air quality	3	There is a variety of systems in the building, ventilation is not optimal
<b>Sub-total:</b>	<b>29</b>	

Rating System: Excellent (4 points); Good (3 points); Fair (2 points); Poor (1 point); and Failing (0 points)					
	ES K-2	IS 3-6	MS 7-8	HS 9-12	ADMIN
	Penn London ES	Avon Grove IS	Fred S Engle MS	Avon Grove HS	District Offices
<b>Architectural</b>	19	32	28	18	20
<b>Structural</b>	24	28	24	22	20
<b>Mechanical - HVAC</b>	27	39	40	29	22
<b>Plumbing</b>	16	21	20	18	14
<b>Fire Protection</b>	0	4	4	0	0
<b>Electrical</b>	22	28	32	22	21
<b>Technology</b>	3	3	3	1	3
<b>Building Total:</b>	<b>111</b>	<b>155</b>	<b>151</b>	<b>110</b>	<b>100</b>
Percentage score of possible 180	61.67%	86.11%	83.89%	61.11%	55.56%
<b>Site Amenities</b>	16	21	18	15	12
<b>Site Conditions</b>	8	10	9	5	5
<b>Site Total:</b>	<b>24</b>	<b>31</b>	<b>27</b>	<b>20</b>	<b>17</b>
<b>Combined Total:</b>	<b>135</b>	<b>186</b>	<b>178</b>	<b>130</b>	<b>117</b>
Percentage Score of possible 216	62.50%	86.11%	82.41%	60.19%	54.17%
	3			2	1

## District-wide Building Evaluation Summary



LEARN MORE AT  
[energystar.gov](http://energystar.gov)

## ENERGY STAR<sup>®</sup> Scorecard

# 50

ENERGY STAR<sup>®</sup>  
Score

### Avon Grove SD - Avon Grove High School - 124150503

Primary Function: K-12 School  
Gross Floor Area (ft<sup>2</sup>): 214,104  
Built: 1957

For Year Ending: June 30, 2014  
Date Generated: December 18, 2014

Property Address:  
Avon Grove SD - Avon Grove High School -  
124150503  
257 East State Road  
West Grove, Pennsylvania 19390

For the year ending in June 2014, this building used 123.3 (kBtu/ft<sup>2</sup>) on a source energy basis. The Environmental Protection Agency's (EPA's) ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

# 9-12 Facility - School Tour



Avon Grove School District  
High School Educational Model  
Avon Grove High School

School District Overview

The Avon Grove School District is a K-12 public school system that serves over 5,000 students in four schools: Penn London Elementary School (K-2); Avon Grove Intermediate School (3-6); Fred S. Engle Middle School (7, 8); and Avon Grove High School (9-12).

Geography: The District is located in a rural-suburban setting 34 miles southwest of Philadelphia, Pennsylvania, and 18 miles northwest of Wilmington, Delaware. Avon Grove covers 67 square miles and consists of five townships, namely New London (1714), London Grove (1723), London Britain (1725), Penn (created from Londonderry Township in 1817), and Franklin (1852), which were created and organized in that order. Avondale (1894) and West Grove (1893) are the two boroughs within London Grove Township. Due to the closeness of the two boroughs (less than three miles in distance from each other), it was natural that the area became known as *Avon Grove*.

Student Demographics: 75 percent Caucasian; 19.5 percent Hispanic; 2.5 percent African American; 1.9 percent Asian; and less than 1 percent both American Indian/Alaskan Native and multi-racial.

Educational Mission, Vision, & Strategic Goals

<b>Vision</b> All Avon Grove students are well prepared to create their own futures.		
<b>Mission</b> The purpose of the Avon Grove School District is to foster a learning environment for all students to be exceptionally well prepared to succeed and lead full and meaningful lives.		
<b>Strategic Goals</b>		
Increase learning opportunities for all.	Develop and implement a systems thinking approach.	Develop and establish a communications and community outreach plan.

## Program Overview

Avon Grove High School is a comprehensive high school that serves students in grades 9 through 12. Core instruction is provided in the areas of language arts, math, science, and social studies. Applied Engineering, art, business, family and consumer science (FACS), music, physical education, and health and world language (French, German, Italian and Spanish) comprise elective options that supplement the core. Additionally, students are supported in pursuing alternative educational options, including vocational-technical programs, dual enrollment at the college level, educational training programs and online options for enhancement or credit recovery.

The curriculum at Avon Grove High School provides a variety of learning opportunities for students in PA core-aligned courses that meets the diverse needs of all students. This occurs at the academic levels most appropriate for each individual learner, including options at the Advanced Placement (AP), Honors, College Preparatory and Academic levels. The curriculum for the educational program is built using the Understanding by Design (UbD) framework. This framework centers on three stages: desired results, evidence of mastery, and the learning plan.

The school's goal is for each student to become a lifelong learner and be prepared for success at the post-secondary level. This is true whether a student will pursue further education in college (two year, four year or vocational-technical program), engage in work or apprenticeship, or pursue other options in line with their personal goals and interests. Students are exposed to a variety of teaching styles by highly-skilled teachers who aim to connect classroom learning to future needs and requirements of the educational and workforce environment. While the current educational setting has provided a solid foundation for students graduating from Avon Grove High School, the future of education and each student's success needs to be reshaped to meet the demands students will encounter in the 21st century.

Learning is in the process of significant transformation from the existing model to one that will support students in careers that have not even been created. The future of learning at the high school level will therefore need to be centered around not only the content of each course, but also the broader competencies that will allow students to respond to changes in our society with creativity and success. To be successful, students must be able to acquire, analyze and process information; work with others collaboratively (in person or remotely); utilize, improve, or develop systems to resolve problems; allocate resources and processes to identify and then solve problems; and select or create the most appropriate tools to make each of these things happen.

To support each student in developing these competencies, Avon Grove High School as a whole, as well as each individual classroom, must demonstrate the capacity to support learning that is collaborative, self-directed, personalized, active, and student-driven. In its current configuration these goals are difficult to attain. Projecting into the future, these goals will become progressively further out of reach for our students, at the same time that universities and employers expect this to be the norm.

The District has developed and is guided by the following class sizes for each grade level: Avon Grove High School class sizes are determined by administration in consideration of content, student instructional levels, workstations and other factors.

## Educational Specifications

See the 9-12 Educational Specifications Checklist. The specifications focus on the following areas of the building:

- Teaching and Learning Environment – General Education, Special Education, and Special Areas Education.
- Student Services – Guidance and Related Services
- Common, Multi-Purpose Spaces – Cafeteria, Gymnasium, Library Media Center
- General, Operational – Kitchen, Building Systems (HVAC), Technology

### Teaching and Learning

Avon Grove High School School has two floors of classrooms along with portable units used for core and exploratory instructional space. Classroom space varies significantly across areas of the building, meaning that the value of the instructional space also varies from classroom to classroom. The space within each classroom that is available for flexible grouping, collaborative activities, and project-based learning varies significantly depending on the room, meaning that not every teacher or student has the potential to engage in this type of learning, even if the curriculum and concepts being explored would best be served in this manner. In trying to provide adequate space and a learning environment that prepares the students to effectively utilize 21<sup>st</sup> Century Skills, this lack of flexibility is a significant barrier to this progress.

The core instructional spaces allow for co-teaching and can fit up to 30 students. Portable classrooms are slightly smaller making it more challenging to comfortably fit up to 30 students. Each classroom is equipped with either individual student desks or collaborative tables, wireless internet access, and an interactive whiteboard with a short-throw projector. In looking forward

to the progression of the secondary campus to a 1-1 environment, additional support and infrastructure will be necessary in each classroom, including charging towers. For those classrooms that are already tightly configured, the additional space required for these units, as well as the movement to and from the units, will create additional space concerns for teachers and administrators related to this implementation.

Student lockers are located in the hallways of each floor (including portable classrooms) in proximity to student classrooms. Support classrooms are available for small group instruction, progress monitoring, and direct instruction. Some of these classrooms provide space for collaborative activities and multi-sensory educational experiences. Each classroom has a sufficient number of electrical outlets (approximately one outlet every six feet to meet the technical needs of the classroom teacher). Several classrooms that support students with special needs allow for space for specialized equipment and small learning centers, but other locations are either too small for the specialized equipment, or are too small to schedule more than a handful of students in a particular section, limiting the options for students, teachers, and administrators. Specialized classrooms are equipped with sufficient outlets for devices and student assistive technology.

The core instructional program includes learning in English Language Arts (ELA), mathematics, science and social studies. The ELA, mathematics and social studies classrooms are all similar, if not interchangeable teaching locations. The science classrooms are equipped as dual teaching locations, including space for direct instruction as well as limited lab capabilities, depending on the core instructional subject being taught. The science classrooms also include limited interior storage locations, as well as additional shared closets for storage between certain classrooms.

The elective offerings are an important part of the student experience at AGHS, providing a variety of experiences to help students determine areas of interest and strength, as well as guidance related to the career and educational options that may be possible in each student's future. These offerings expand upon the art cycle experiences from FSEMS and provide students choice in pursuing their goals and aspirations. Additionally, these courses serve as a springboard for student experiences within the career pathways model at Avon Grove High School. The resources available for each elective department include:

- *Art* - Rooms include studio space for group instruction and student project creation, storage, and specific space for unique curricular needs (e.g.: computer lab for graphic design, darkroom for photography use, kiln room for ceramics),
  - The current capacity and structure of rooms in the Art department is such that several teachers are traveling among rooms throughout the day to deliver the

varied curriculum of the department. Program expansion is not possible due to space constraints, and flexibility within the master schedule is compromised due to these resource and space limits. Beyond this, the curricular expansion of the program to meet the needs of students preparing for emerging careers in the 21st century is also limited due to the capacity to expand resources in the existing spaces.

- *Applied Engineering* - Classrooms used collaboratively each provide space for small or large-group instruction, media creation, and construction space for individual or group projects, and demonstration area for projects in process. One classroom is also equipped as a computer lab for the CAD/CAM functions included in the curriculum.
  - There have been several recent updates to this space, including additional technology infrastructure and the alignment of engineering tools and software to the manufacturing hardware that is available. Flexibility to adapt to emerging trends in the Applied Engineering field will be possible with the amount of space available in the three specially-designed classrooms.
- *Business* - Classrooms are equipped as a computer lab with individual desktops for each student. In these locations, student project creation and direct instruction occur in the same location.
  - Classroom upgrades have recently occurred due to the technology-specific needs of the curriculum.
- *Family and Consumer Science (FACS)* - Two classrooms include six mini kitchen spaces with stovetop, oven, sink area and dishwasher, refrigerator and freezer storage, space for whole-class instruction and demonstration, as well as washer and dryer. Additional classroom is used for the fabrics and sewing curriculum, equipped with sewing machines, limited storage, and group instruction area,
- *Music* - Area includes storage for instruments, music and equipment as well as two large group rehearsal areas, mini-rooms for lesson and individual practice and a single piano lab to deliver curriculum. Area is located in proximity to stage and auditorium,
- *World Languages* - Classrooms are very similar to those described above for content instruction in ELA, math and social studies, although several are significantly smaller than other classrooms in building and department.

Classrooms used by certified special education teachers are located within the regular flow of the building, but in many cases are significantly smaller than those used in the regular education core. This presents opportunities for case managers and other support staff to be located in proximity to all other classrooms in the building, as well as lockers and the common space used by all students. Unfortunately, the limited space in several classrooms relegates these to single use spaces, unavailable for other curricular areas or purposes when not

occupied by special education teachers. In addition to the classrooms used for academic support, there are also specialized classrooms in use for low-incidence programs, including autistic support, emotional support and life skills.

### Student Services

The AGHS guidance counselor offices are located in the middle of the building. The rooms are accessible for students and parents throughout the day, and include a reception desk and waiting area for 3-5 students. This location currently houses 5 of the six guidance counselors for AGHS, creating a very tight and cramped space for anyone needing these services, or working in the area. There is no adjoining conference space nor location for small group meetings, whether for college presentations, intervention or support. The location of these services is in a highly visible and easily accessible location, notwithstanding the limitations of the space itself. Consideration must be given to creating space for small groups of students to meet, with internal or external support teams, to engage in individual or group programs aligned with the K-12 guidance 339 plan.

Office space for the school psychologist and speech and language therapist is located in a small meeting area near the guidance offices and allows for student testing and storage of student files and assessment materials. For related service providers, such as OT/PT, there are one or two small rooms in the school for these services, although none are specifically designed for these purposes and the associated resources to provide these services, nor are they located in close proximity to the primary locations for education of students with these needs.. Additional storage space should be considered to house equipment and materials for related service providers.

### Multi-Purpose and Operational Spaces

Professional learning and collaboration for employees is imperative for growth and success of the teaching staff at AGHS. Teachers currently utilize their individual classrooms or the one small conference room for team, curricular, or 9th grade academy meetings that occur during the day. For meetings scheduled after school hours, additional space can be used in the cafeteria or auditorium, although there is no permanent solution to projection needs in either of these spaces. In addition to these limitations, there are also teachers from specific departments who face significant logistical challenges to meeting with other department members due to the location of specialized classrooms in various areas of the building.

The LMC at AGHS is a multi-media center, featuring traditional print sources of information and texts, as well as flexible gathering spaces and technology for students to collaborate and

interact with students within and across other grades. Approximately half of the furniture is light enough for students to reconfigure as needed depending on their purpose for visiting the LMC. This space is also the location of the TV studio and future location of the career center, due to the lack of space available in the guidance offices. Unlike the middle school, which is using its LMC as the hub for the 1-1 rollout, including a repair location and tech store, this space is too small to accomplish this purpose, necessitating another location for these needs be found at AGHS for the 1-1 rollout beginning in the 2017-2018 school year. Additional workspace and resources should be considered for this space to provide an atmosphere of innovation for students and professionals.

The TV Studio is capable of broadcasting news and events on a daily basis to all classrooms at AGHS, as well as providing a location for students and teachers to prepare public-service-style announcements for internal and external viewers. This facility was built during the 2015-2016 school year through a collaborative project by teachers and students, demonstrating the project-based and authentic learning that should be the hallmark of a 21st century learning environment. The location of the TV Studio was selected as it was the only reasonable space at AGHS for this purpose. In reality, the TV Studio should be imagined as connected to the auditorium and performing arts areas of the building to best maximize the production capabilities of this space.

The AGHS cafeteria has low ceilings in approximately  $\frac{3}{4}$  of the space, moderate natural lighting, and rectangular cafeteria tables with benches for at least 12 students per table to maximize space and reduce noise level for each of the three lunches currently on the AGHS schedule. Students can be served in the kitchen area (lunch in a hot line, cold line or salad bar), a snack line, as well as a grab and go station meaning most students can be served in approximately 10 minutes.

The gymnasium and athletic fields must serve the dual purpose of not only the curricular requirements of the physical education program, but also the demands of the interscholastic, intramural, and internal use by students. In this regard, there are gender-specific locker rooms with lockers, storage and office space in each location, and limited student shower facilities. The gymnasium includes a full-sized gym that can be used as a basketball court or other open floor options, and bleacher seating. There is an auxiliary gymnasium that can be used as an additional teaching station, as well as a practice area during the winter or inclement weather. The current size of the AGHS gymnasium allows for enough teaching space for approximately 2 or 3 sections of assigned students, limiting the flexibility of the master schedule as well as the use of the space after school for athletics or intramurals. This space is also too small for the

entire student body to attend a single event and each student have a seat in the bleachers. Due to the size of the gymnasium there is little to no availability for community usage during the regular school week.

There are three synthetic turf fields for usage by the high school physical education program that adjoin the high school, as well as the competition track, and tennis courts across Schoolhouse Road for usage by the curricular and interscholastic program. Baseball and softball fields are located on the campus and are jointly scheduled with the middle school to avoid overlaps in the curricular or interscholastic program. The natural turf fields are not available to community groups based on the significant amount of current usage by curricular and extracurricular groups, and the lack of additional options for these groups when the fields absorb too much play.

The auditorium at AGHS has seating for approximately 700 spectators, meaning only one grade of students can attend any presentation or performance at a time. The performance space in the auditorium has enough stage and wing space for most productions, but has a significant lack of storage capacity. There is also no external access for the delivery of sets, equipment or instruments, requiring these to be brought in through hallways and access points not designed for this purpose. The current sound and technical capabilities of the AGHS auditorium are sorely lacking, requiring a significant investment to bring the production capacity of this space up to appropriate levels for the students and community using this space. Further, as referenced earlier, the distance between the auditorium and TV Studio limits the real-time production capabilities of this space.

In addition to the stage limitations, the rehearsal and classroom spaces for the performing arts program lack storage for instruments, equipment, uniforms and the music library, individual private practice areas, and capacity for non-performance classrooms for the general student body. In the current configuration, there is only enough space in the piano lab for 12 students, and there are no auxiliary classroom spaces that are not already accounted for in the rehearsal structure of the department.

Two areas for learning that are currently lacking at AGHS are a STEAM (Science, Technology, Engineering, Art, Math) Lab and any Large Group Instructional Areas (LGIAs). The STEAM Lab would be a space that would be centrally located in AGHS, accessible to all students under the supervision of certified staff, and serve as a location for engaged collaboration for students and teachers. It would include a variety of technologies (hardware, software, machining capabilities) as well as the necessary systems for usage (ventilation, dust catchers, etc.). It would be larger than a standard classroom, visible from the adjoining hallways, and a hub of intellectual and creative energy.

Large Group Instructional Areas are those spaces that can be made available for medium-sized groups, allowing for multiple sections of the same course to meet, or portions of a grade to come together for specific aspects of learning. These spaces provide flexibility in developing the master schedule, as well as simulating the learning environment many students will experience at the collegiate level. These spaces exist in all district facilities except AGHS (the auditions in PLE, AGIS, and FSEMS) and would be an enhancement to the current educational program.

As the flagship school of the district, AGHS should not only serve as an education center for its students, but also as a hub of community activity. With its current structure, the limitations discussed earlier prevent significant involvement of the community in accessing AGHS for learning, performance, and athletic endeavors. As a space reimagined as a community hub, access to the gymnasium, auditorium and specific classrooms is adequate, although the capacity of these spaces to accommodate full community involvement and access is limited.

Revisiting the aspirations for student learning in a 21st century model, it is incumbent upon the AGSD to expand options for students to meet their educational needs. This may include a traditional day program, learning after school hours or in an asynchronous environment, and AGHS must be able to adapt to a variety of learning processes throughout each day, for both students and teachers, to best connect theory and practice. The instructional spaces at AGHS lack the flexibility necessary to promote the interactions between students and teachers that mirror those to be encountered in their futures.

Presentation to the Facility Input Group

**21<sup>st</sup> Century Learning Environments:**  
*Today's classrooms for tomorrow's world*

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# Did You Know?

- <https://www.youtube.com/watch?v=uqZiOoYI7Y>

# Essential Questions

- What will today's classrooms require to accommodate tomorrow's students and technologies?
- How will future teaching and learning styles translate into today's classroom environment?
- What will tomorrow's learning spaces look like?
- What should be included in classrooms of the future to prepare students for tomorrow's workforce?

# Competencies of the 21<sup>st</sup> Century Worker

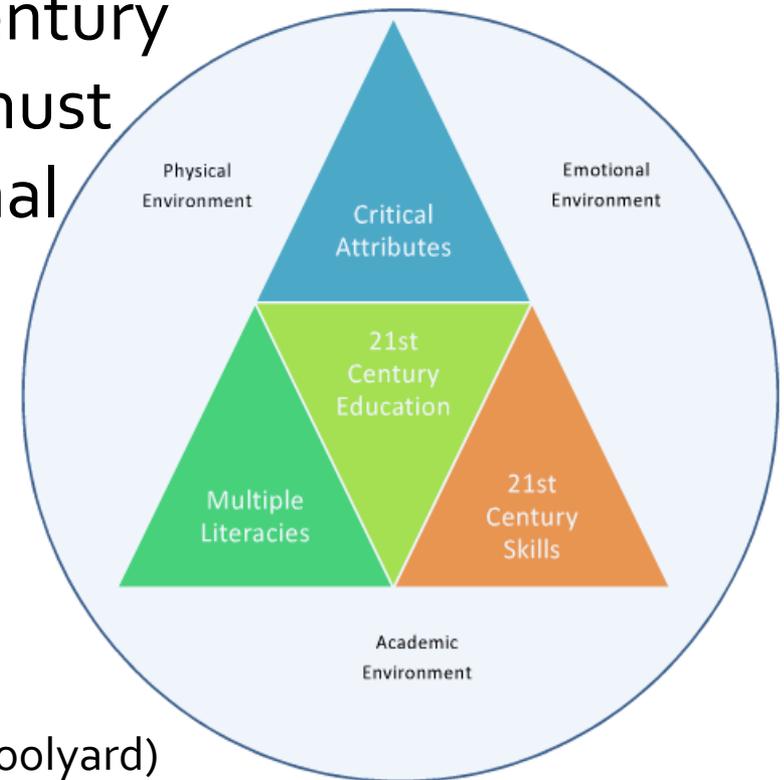


The worker of the 21<sup>st</sup> Century must be able to apply....

- ❑ Resources—allocating time, money, materials, space, and staff
- ❑ Interpersonal Skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds
- ❑ Information—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using technology to process information
- ❑ Systems—understanding social, organizational, and technological systems; monitoring and correcting performance; and designing or improving systems
- ❑ Technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies

# 21<sup>st</sup> Century Framework

This graphic illustrates the 21<sup>st</sup> century framework. These components must be embedded within an intentional designed learning environment.



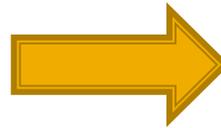
**Special attention must be given to the following:**

- Physical Environment (classroom, campus and schoolyard)
- Social/Emotional Environment
- Academic Environment

# The 21<sup>st</sup> Century Classroom

## Transformation

20<sup>th</sup> Century Classrooms-----21<sup>st</sup> Century Classrooms

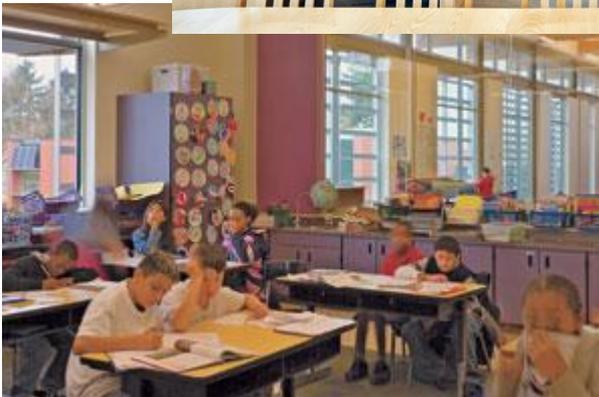


- The 21<sup>st</sup> Century classroom is **student centered**.
- The 21<sup>st</sup> Century classroom fosters **collegiality**.
- The 21<sup>st</sup> Century classroom establishes **hierarchy and order**.
- The 21<sup>st</sup> Century classroom promotes **connections**.
- The 21<sup>st</sup> Century classroom expands learning both **inside and outside**.
- The 21<sup>st</sup> Century classroom is **agile**, adaptable to change.
- The 21<sup>st</sup> Century classroom has **variety**.
- The 21<sup>st</sup> Century classroom has **layers**.

21<sup>st</sup> Century Classrooms are designed to support learning that is Self-Directed, Independent, Interdependent, authentically Personalized and Differentiated, learning that is Active rather than Passive, and Student-Driven.

# Student Centered

- Create a focus on the whole student



# Hierarchy and Order

- Establish levels of importance, strength, and significance



# Collegiality

- Create an environment of learning and support



# Connections

- Create and support connections between:
  - Students
  - Teachers
  - Parents
  - Community



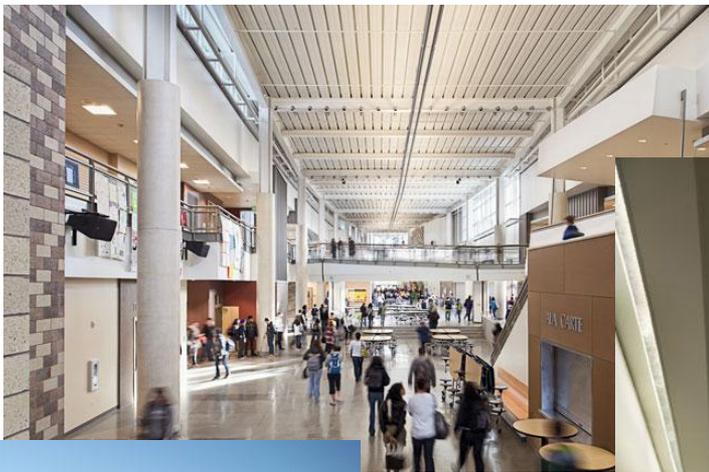
# Inside/Out

- Expand teaching and learning opportunities by utilizing the entire campus rather than just the interiors of the building.



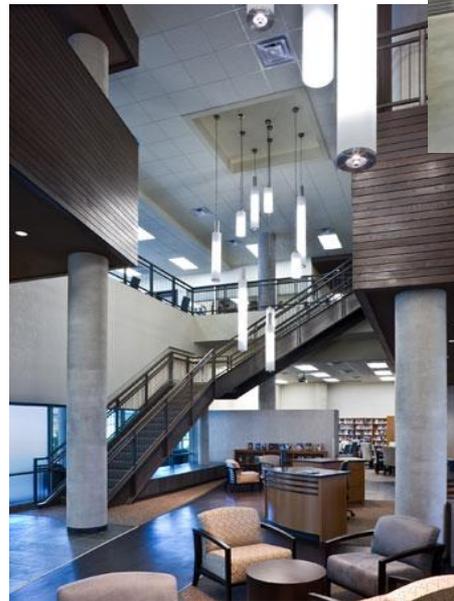
# Agility

- Create an environment that can adjust to changes.



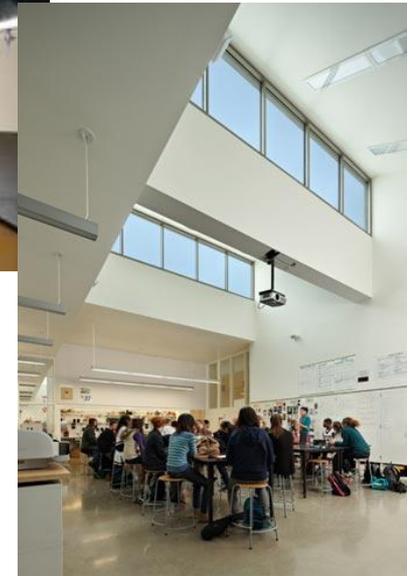
# Variety

- Create dynamic and diverse:
  - Spatial sizes
  - Groupings
  - Organizational Arrangements
  - Functional Capabilities



# Layers

- Create a physical environment that grows out of the site
  - Vertically
  - Horizontally



# Transformation

- Create an environment that elevates and focuses teaching/learning on the future.



# Questions/Comments

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## 21<sup>st</sup> Century Schools

21<sup>st</sup> Century Schools are designed to support learning that is Self-Directed, Independent, Interdependent, authentically Personalized and Differentiated, learning that is Active rather than Passive, and Student-Driven.

- The 21<sup>st</sup> Century school/classroom is **student centered**.
  - Does the AGHS offer a focus on the whole child?
- The 21<sup>st</sup> Century school/classroom fosters **collegiality**.
  - Does the AGHS promote an atmosphere of learning?
- The 21<sup>st</sup> Century classroom establishes **hierarchy and order**.
  - Is there a clear identity of what the important programs are at AGHS?
- The 21<sup>st</sup> Century school/classroom promotes **connections**.
  - Does AGHS offer opportunity for varied connections between students, teachers, parents and the community?
- The 21<sup>st</sup> Century school/classroom expands learning both **inside and outside**.
  - Does AGHS offer opportunities for learning outside of the internal classroom environment?
- The 21<sup>st</sup> Century school/classroom is **agile**, adaptable to change.
  - Can AGHS adapt to changes in education?
- The 21<sup>st</sup> Century school/classroom has **variety**.
  - Does AGSHS offer dynamic and diverse learning spaces for students?

# AVON GROVE SCHOOL DISTRICT

CHESTER COUNTY, PA



November 10, 2016

## AVON GROVE HIGH SCHOOL

### CAPACITY, UTILIZATION AND BUILDING SIZES: 9-12 HIGH SCHOOL

	<b># Students</b>		
<b>2016/17 Enrollment</b>	<b>1830</b>		
<b>Current Building Area</b>	<b>214,104</b>		
<b>Modulars</b>	<b><u>12,000</u></b>		
<b>Total Building Area</b>	<b>226,104</b>		
<b>Square/Foot per Student</b>	<b>124</b>	<b>With modulars</b>	
		<b>Building</b>	
<b>National Median Average for High Schools in US</b>	<b>SF/Student</b>	<b>Area</b>	<b>Delta</b>
<b>1970 SF/Student</b>	<b>120</b>	<b>219,600</b>	<b>6,504</b>
<b>1987 SF/Student</b>	<b>153</b>	<b>279,990</b>	<b>(53,886)</b>
<b>2006 SF/Student</b>	<b>163</b>	<b>298,290</b>	<b>(72,186)</b>
<b>CEFPI Conference</b>			
<b>Average of 23 High Schools</b>	<b>193</b>	<b>353,190</b>	<b>(127,086)</b>
<b>Size range from 158 to 258 SF/Student</b>			
<b>CEFPI Utilization</b>			
<b>Range 80-85%</b>			
<b>90% makes scheduling very difficult</b>			
<b>75% if using Block scheduling</b>			

CEFPI: Council of Educational Facilities Planners International

# MEETING MINUTES

## Facilities Input Group (FIG)

Date	Start	End	Next Meeting	Next Time	Prepared by
11/09/2016	6:30 PM	8:30 PM	JAN 2017 TBD	6:30 PM	M. O'Hara
11/10/2016	6:30 PM	9:15 PM			

### Attended by:

Robert Ruddy	Ed Farina	Dr. Marchese	Matt Crockett
Bob Weidenmuller	Jeff Billig	Dr. Snopkowski	Victor Mantegna
Nicole Morley	John Auerbach	Scott DeShong	Jeremy Curtis
Neil Huber	Rich Eagles	Bonnie Wolff	Cale Hilbolt
Carolyn Hammerschmidt	Andrea Danucalov	Uwe Buescher	William Wood

### Public:

Members of the public in attendance on 11/09/2016: 8 and 11/10/2016: 6

### Summary of the Meeting

#### Opening Review of Previous Meeting and Current Meeting Agenda

Mr. Carsley welcomed everyone to the 6<sup>th</sup> FIG meeting, and recapped the October 11, 2016 FSE Tour meeting. He introduced the following group for the AGHS Tour:

Dr. Michael Snopkowski – Presentation of the Avon Grove High School 9-12 Educational Model  
 Dr. Marchese – Overview of Enrollment Data and 21<sup>st</sup> Century Learning Presentation 11/10/2016  
 Mr. Tom Gilbert and Mr. Scott Adams – Gilbert Architects Presentation of Avon Grove High School Building Evaluations from the Feasibility Study  
 Matt Crockett and Victor Mantegna – Directing the Tour of Avon Grove High School

#### AGHS 9-12 Educational Model Program

Dr. Snopkowski, Director of Secondary Learning and Teaching, opened with a review of our District Vision, Mission and Strategic Goals. He continued with the overview of the 9-12 High School Educational Model Program:

Teaching and Learning Environments – General and Special Education, and Elective Courses  
 Student Services – Guidance and Support Services  
 Common and Multi Purpose Areas – Gym, Cafeteria, Auditorium, and Library Media Center  
 General Operational Features of Building – Kitchen, Building Systems and Technology

AGHS serves approximately 1,836 students in Grades 9-12:  
 Core Curriculum – Language Arts, Science, Math and Social Studies  
 Electives Courses – Arts, Applied Engineering (Wood, Metal, CAD), Business, Family Consumer Sciences, Music and 4 World Languages – Spanish, French, German and Italian

## **Enrollments**

Dr. Marchese provided the enrollment numbers as of November 1, 2016, with 5,017 students enrolled in AGSD. Avon Grove enrollment numbers are updated and published on our website the 1<sup>st</sup> of every month.

## **FEASIBILITY STUDY – AGHS BUILDING EVALUATIONS**

Tom Gilbert, Gilbert Architects reviewed PDE Building Capacity vs. Functional Capacity for AGHS:

- PDE Capacity for High Schools is 25 students per classroom, and 20 students per science lab. PDE target is 90% (established in 1970). AGHS is at 126% capacity.
- AGHS Functional Capacity is at 108% of Building utilization; 80% functional capacity is recommended, and is best for high schools in order to schedule properly.

Modular units are not included; per PDE, Modular units are not considered permanent. Without Modular units, capacity utilization further exceeds target.

Scott Adams, Gilbert Architects, reviewed the Building Evaluations from the Feasibility Study. Overall, AGHS Evaluation Score was 60.19%, 2<sup>nd</sup> lowest of all district buildings. On the Energy Star Analysis, AGHS scored 50 out of a target of 75.

## **TOUR OF AGHS – 11/09/2016**

Matt Crockett, Victor Mantegna, and Principal Scott DeShong led the walking tour of AGHS, which included: Main Lobby, Auxiliary Gym, Weight Room, Main Gym, Auditorium, Band/Choral Rooms, Cafeteria, and Library Media Center. The tour also included the Industrial Arts Wing, with the Wood and Metal Shops, Graphic Arts, Photography and Ceramic Arts rooms.

## **21<sup>st</sup> Century Learning Presentation - 11/10/2016**

Dr. Marchese opened with the video, "Did You Know", on globalization and advancement in information technology. 21<sup>st</sup> Century Learning prepares students to be successful in a global environment, and enables students to meet challenges of college, technical school, the military or the workforce.

21<sup>st</sup> Century schools and classrooms:

- are student centered
- foster collegiality
- establish hierarchy and order
- promote connections
- expand learning both inside and outside the classroom
- are adaptable to change
- have variety

## **TOUR OF AGHS – 11/10/2016**

Dr. Snopkowski, Principal Scott DeShong, Pupil Services Director Jeremy Curtis, and Cale Hilbolt, Special Education Supervisor guided our tour the second night. The areas visited included: MDS Room, various classrooms for Math, Science and World Language, Modular classrooms, Family Consumer Science; Special Education and Life Skills rooms; Nurses and Guidance Offices.

## **Debrief**

Tom Gilbert shared data on Capacity, Utilization and Building Sizes for High Schools from the Council of Educational Facilities Planners International (CEFPI), and how AGHS compares to National Median Average for High Schools.

John Auerbach – AGHS building expansion limitations  
 Bob Weidenmuller – Parking for TCHS Students; Team Concept for Grade 9  
 Rich Eagles – Current AGHS building ability to meet current and future student needs; project completion time once need determined  
 Jeff Billig – Study Halls in Auditorium and Cafeteria

Discussions on Maintenance over last 3 years, determining which projects to complete pending outcome of FIG recommendations.

### Upcoming Meetings

The next meeting of the Facilities Input Group will be determined in early December 2016. Once confirmed, an email will sent out to the group.

### Schedule

<del>August 9, 2016</del>	<del>PLE Tour</del>	Completed
<del>September 13, 2016</del>	<del>AGI Tour</del>	Completed
<del>October 11, 2016</del>	<del>FSEMS Tour</del>	Completed
<del>November 7, 2016</del>	<del>HS Tour</del>	<del>Rescheduled to November 9 &amp; 10, 2016</del> Completed
January 10, 2017	Financials	
February 14, 2017	External Tours as Determined by FIG	
March 14, 2017	Work Session	
April 11, 2017	Work Session	
May 9, 2017	Work Session	
June 13, 2017	Work Session	* a new date will need to be selected AGHS graduation*
August 8, 2017	Work Session	
September 12, 2017	Presentation of FIG recommendation to AG School Board of Directors	