

Appendix B | Educational Adequacy Assessment (EFEI)

Albemarle County High Schools
High School Facilities Planning Study

Final Report | 14 December 2017

EDUCATIONAL ADEQUACY ASSESSMENTS
for
Albemarle County
High Schools Facilities Planning Study

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SCOPE of the WORK

The purpose of conducting Educational Adequacy Assessments was to ascertain how well or how poorly the existing high schools support Albemarle County Public Schools' vision and goals for High School 2022:

In order to develop criteria for this assessment, we took our (FNI) standard Educational Facilities Effectiveness Instrument [EFEI], which has been used internationally, and customized it to align with ACPS's Design Imperatives for High School 2022. These Design Imperatives are:

- **Transparency:** Students must see the work and work styles of other students. Contagious Creativity.
- **Sustainability:** Environmentally and Economically Sustainable.
- **Flexibility:** Learning environments can change minute-by-minute, day-by-day, year-by-year.
- **Mobility/Interactivity:** Learning, connectivity, and presentation capabilities are never tethered to specific places.
- **Multiage:** Environments are equally comfortable for/usable by all ages.
- **Student-Crafted Learning Environments:** Learning environment control and design resides with students at every age.
- **Making Everywhere:** Spaces are not designed for passive an/or one-directional learning.
- **Project/Problem/Passion-Centered Learning Spaces:** Spaces are not designed to isolate students from their world or to separate them from project work possibilities.
- **Choice and Comfort:** Every space is created with student choice as a core design principle, and every space allows students to find their comfort zone.
- **Inside/Outside:** Students move comfortably and casually between indoor and outdoor learning environments.
- **Spaces Built for Student Learning:** All design decisions are evaluated based on student learning needs and child and adolescent brain research, not on adult needs or adult convenience.

The following pages contain the summary results of our Educational Adequacy Assessments as well as detailed school-by-school assessments.

Educational Facilities Effectiveness :: Assessment Summary

December 2017

School Division: **Albemarle County Public Schools, Virginia**

Legend

4.00 to 5.00	Excellent
3.00 to 3.99	Satisfactory
2.00 to 2.99	Borderline
1.00 to 1.99	Poor
0.00 to 0.99	Inadequate

		Albemarle HS	Monticello HS	Western Albemarle HS	Murray HS
1	FLEXIBILITY	2.25	2.75	1.75	2.50
2	MAKING EVERYWHERE	0.75	1.25	0.75	1.25
3	TRANSPARENCY	0.00	2.75	0.00	0.00
4	CHOICE AND COMFORT	3.00	1.75	2.25	3.25
5	WATERING HOLE SPACE	1.50	2.25	1.50	1.75
6	CAVE SPACE	1.25	4.75	0.50	0.75
7	UNIVERSAL DESIGN	1.00	3.50	1.25	1.50
8	TECHNOLOGY	3.25	3.50	3.75	2.75
9	ACOUSTICS	2.50	2.25	2.50	2.25
10	TEACHERS PROFESSIONAL SPACE	1.25	4.50	2.50	1.25
11	WELCOMING ENTRY	3.75	4.25	2.75	2.50
12	SHARED LEARNING RESOURCES	3.50	3.75	3.25	2.00
13	STUDENT-CRAFTED LEARNING	0.50	0.75	0.50	2.50
14	ARTS STUDIOS	3.25	2.50	2.25	2.00
15	MUSIC AND PERFORMANCE	4.75	3.50	3.25	0.50
16	HEALTH & PHYSICAL FITNESS	3.75	3.75	3.25	1.50
17	TOILET ROOMS	1.75	3.25	3.00	4.25
18	STUDENT DINING	2.00	2.25	1.75	0.50
19	SAFE LEARNING SPACES	2.50	4.50	2.75	2.00
20	DAYLIGHTING AND ARTIFICIAL LIGHTING QUALITY	2.75	3.25	0.25	2.50
21	INSIDE/OUTSIDE CONNECTIONS	3.50	3.75	2.00	2.75
22	NATURAL VENTILATION	1.50	1.75	0.75	1.75
23	SUSTAINABILITY	0.25	0.50	0.00	0.50
24	LOCAL SIGNATURE	1.00	2.00	0.50	1.25
25	CONNECTED TO COMMUNITY	2.00	2.25	2.25	2.00
26	AESTHETICS	2.00	3.00	1.50	2.25
EFEI ASSESSMENT SCORE (out of 130 possible points)		55.50	74.25	46.75	48.00
EFEI RATING (5.00 Scale)		2.13	2.86	1.80	1.85

Educational Facilities Effectiveness Instrument

School Name: Albemarle High School
 School Division: Albemarle County Public Schools, Virginia
 Assessed by: C. Michael Ross, AIA, REFP and Lauren Perry, Assoc. AIA
 Date: 10-Aug-17

Each item evaluated is given a score of 0.0, 0.25, 0.5, 0.75, or 1.0. 0 = None; 1 = Ubiquitous

	Assessment Score
1 FLEXIBILITY	
How flexible are the principal learning spaces for differentiated learning?	
1) Principal learning spaces flexibility support multiple modes of learning	0.50
2) Enclosed learning spaces are flexible and have at least one break-out area within the room	0.50
3) Principal learning spaces allow students to independently access electronic and printed resources	0.50
4) Resource space for accelerated students and students with special-needs are integrated into principal learning areas	0.25
5) The learning environment can easily change in response to the learning activity	0.50
Pattern Score	2.25
2 MAKING EVERYWHERE	
How well does the learning environment in general promote making?	
1) Spaces for project building (e.g. makerspace, production room, etc.)	0.25
2) Ample display space for student projects	0.00
3) Making is visible to other students not in the same class	0.00
4) Collaborative 'think-tank' space is adjacent to messy work areas	0.25
5) There is a connection to the outdoors for experimentation	0.25
Pattern Score	0.75
3 TRANSPARENCY	
To what extent is learning visually transparent?	
1) Breakout spaces are supervisable from adjacent learning spaces	0.00
2) Teacher collaboration/work spaces have visual access to student learning spaces	0.00
3) There is visibility between learning studios and informal learning areas	0.00
4) There are views of learning activity from common spaces (e.g. cafes)	0.00
5) Majority of learning studios/classrooms, even when self-contained, have transparency to other indoor spaces	0.00
Pattern Score	0.00
4 CHOICE AND COMFORT	
How well do spaces support choice and comfort?	
1) Students can choose from a variety of seating sizes and options in Learning Studios	0.75
2) Furniture can easily be rearranged by students	0.75
3) Areas and furniture are available for student relaxation	0.75
4) Spaces are comfortable, inviting, and home-like (not institutional)	0.50
5) Large common spaces are zoned with different areas for students to find their comfort zone	0.25
Pattern Score	3.00
5 WATERING HOLE SPACE	
What is the quality of Watering Hole spaces?	
1) Students can meet socially at informal indoor gathering places	0.25
2) There are identifiable social gathering spaces on school grounds (outdoors)	0.50
3) Watering Hole spaces are not visually or acoustically disruptive to quiet learning spaces	0.25
4) Indoor social areas have vistas to nature or street life	0.25
5) Most Watering Hole spaces have flexible seating and soft seating available	0.25
Pattern Score	1.50

6 CAVE SPACE		
What is the quality of Cave spaces?		
1)	There are places for individual study, reflection and quiet reading within the Learning Community	0.00
2)	Cave spaces exist throughout school (e.g., library, waiting areas)	0.25
3)	There are small, identifiable areas for small group tutoring or study	0.25
4)	Cave spaces have natural light and vistas	0.50
5)	Cave spaces permit natural surveillance by adults while providing privacy for learner; these spaces promote a sense of safety and security for teachers and students	0.25
Pattern Score		1.25
7 UNIVERSAL DESIGN		
To what extent does the school provide for students of all abilities?		
1)	School provides equal access to all learning areas for students of different abilities	0.25
2)	Small-scaled rooms for student resources and interventions are integrated into the principal learning areas	0.00
3)	Learning spaces allow students to pursue a variety of options for meeting class requirements (text, speech, illustration, film, music, etc.) as best suits their needs and abilities	0.25
4)	A "safe room" or quiet space is available for students who become emotionally disturbed to prepare themselves to reenter the principal learning space	0.25
5)	Space is set aside for addressing the particular emotional and/or intellectual needs of individual students	0.25
Pattern Score		1.00
8 TECHNOLOGY		
How well is technology integrated with the curriculum and principal learning spaces?		
1)	Students can access mobile internet-connected computers throughout the day	1.00
2)	Wireless internet access throughout campus provides "Anytime Anywhere Learning"	1.00
3)	Digital interactive displays are availing in the majority of learning areas	0.50
4)	Spaces for collaboration with mobile technology are provided throughout the school	0.25
5)	Charging stations or adequate power outlets allow students to recharge mobile devices	0.50
Pattern Score		3.25
9 ACOUSTICS		
What is the quality of acoustics in principal learning areas?		
1)	Ambient noise level below 35dB (which studies have shown to correlate to higher student achievement)	0.25
2)	Reverberation Time in all learning areas, including informal learning spaces is suitable for speech presentations (usually below .6 seconds as measured RT60)	0.50
3)	Sound separation between enclosed learning spaces is adequate	0.75
4)	Noise level in learning studios and commons maintained by acoustical panels, soft fixtures and furnishings	0.25
5)	Noise distractions from other learning areas are minimal, and surrounding outside noise from traffic is within acceptable urban ambient range	0.75
Pattern Score		2.50
10 TEACHERS PROFESSIONAL SPACE		
To what extent does school create a professional environment for teachers?		
1)	Teachers share an office space used for collaboration, professional growth, independent work, informal discussion and relaxation	0.25
2)	Teachers have adequate space for private phone calls, family meetings and one-to-one student meetings	0.25
3)	Teacher workspace has digital display for presentation, as well as access to a printer or copier	0.25
4)	Teachers have individual workstations with lockable storage, phone, and internet access	0.25
5)	Teacher workspace offers adequate materials storage	0.25
Pattern Score		1.25
11 WELCOMING ENTRY		
How welcoming is the entrance to the school?		
1)	Clear visual cues to main entrance from parking and pedestrian paths	1.00
2)	Reception area for visitors is clearly visible from main entrance	0.75
3)	Visitor have a place to sit with access to beverages and reading materials	0.50
4)	Administration acts as "eyes on the street" and a welcoming presence at the main entry	0.75
5)	School name, identity / logo / mascot, and school news visible at entry	0.75
Pattern Score		3.75

12 SHARED LEARNING RESOURCES

To what extent are learning resources distributed versus centralized?

1)	A central library/media center serves as space for conducting research and a visible symbol for learning	1.00
2)	Library/media center has ample areas for casual reading, furnished with soft seating	1.00
3)	Access to digital resources are distributed throughout the school	0.75
4)	There is dedicated space to connect to distance learning, including group webcam, teleconferencing, and audio connections	0.50
5)	There are a mix of individual and group quiet study rooms for before, during, and after school work	0.25
Pattern Score		3.50

13 STUDENT-CRAFTED LEARNING

How extensive are student display spaces?

1)	Physical student work is displayed in changeable display systems in circulation spaces of the school	0.25
2)	Student work displayed at main entrance	0.25
3)	Special displays set aside for work in progress	0.00
4)	Digital student work displayed and refreshed throughout school	0.00
5)	Assigned displays for student work in curricular areas	0.00
Pattern Score		0.50

14 ARTS STUDIOS

How well equipped are art labs?

1)	Prep and storage areas with counters and sinks are available	0.75
2)	Large windows provide ample natural light and views	0.50
3)	There are connections to outdoors for messy projects	0.00
4)	There is space for a variety of art activities (drawing, sculpture, ceramics, etc.)	1.00
5)	There is specialty art equipment, such as a darkroom and a kiln	1.00
Pattern Score		3.25

15 MUSIC AND PERFORMANCE

To what extent is music and performance supported?

1)	There is an outdoor area or areas suitable for performance (outdoor piazza, amphitheater, etc.)	1.00
2)	Recording studio and equipment space for student-led projects	1.00
3)	Acoustically separated music practice rooms and space suitable for vocal group practice	0.75
4)	Performance space with stage suitable for instrumental and vocal performances	1.00
5)	Community able to use school facilities for larger performances AND/OR students use community facilities for larger performances	1.00
Pattern Score		4.75

16 HEALTH & PHYSICAL FITNESS

To what extent are health and physical fitness supported?

1)	Facilities available for organized sports (basketball, soccer, football, cricket, etc.)	1.00
2)	Age appropriate outdoor and indoor play spaces available	1.00
3)	Running track and/or nature trails are accessible to school site	1.00
4)	Secure bike storage facilities available for students and teachers, and safe crossings for children and adults entering the site on bike or foot	0.25
5)	Facilities available for personal fitness and health (e.g., yoga, dance, weights, ergo, walking)	0.50
Pattern Score		3.75

17 TOILET ROOMS

To what extent does the design of the bathroom meet needed standards of safety, privacy and cleanliness?

1)	Bathrooms are disconnected from the notion of an institutional environment; clean, hygienic, safe, well lit, cheerful	0.25
2)	Bathrooms are small and distributed throughout the school	0.50
3)	Each bathroom is located adjacent to a fully supervised commons area, such as those included within a Learning Community	0.00
4)	Restroom is decorated and personalized appropriately with student artwork, flowers, etc. and offers natural daylighting or borrowed natural light	0.00
5)	Stalls and urinals provide individual privacy.	1.00
Pattern Score		1.75

18 STUDENT DINING

To what extent is healthy and casual eating supported?

1)	School has a central kitchen/canteen or alternative fresh food provider	1.00
2)	School has indoor eating areas (0.5) and outdoor eating terraces (0.5)	0.75
3)	Students have access to fresh, healthy snacks throughout the day, such as fruits and vegetables	0.25
4)	School has multiple dining areas, for 150 students or less, with small round tables to support emotional learning and dining etiquette	0.00
5)	Main kitchen and café(s) double as learning areas for culinary arts and other learning (0.5) with demo area (0.5)	0.00
Pattern Score		2.00

19 SAFE LEARNING SPACES

How effectively does the school facility provide for the safety and security of students and teachers, and community?

1)	Main entrance is transparent and has visual access to the street (0.5); Administration located at the entrance offer "eyes on the street" passive supervision of all who enter and exit the school (0.5)	0.75
2)	Entry controls protect school safety without alienating students; entry controls promote a sense of community safety and responsibility	0.50
3)	School facility is well organized to promote safe and uncomplicated egress in emergency situations (0.5) and evacuation plans provide a safe meeting place outside of the school (0.5)	0.25
4)	Drop off zone provides easy access to a main entrance and eliminates conflict between student pedestrians and vehicle traffic	0.50
5)	Effective lighting illuminates all entrances and exits, blind corners, and pathways to public streets and spaces at night	0.50
Pattern Score		2.50

20 DAYLIGHTING AND ARTIFICIAL LIGHTING QUALITY

To what extent does natural daylight penetrate learning areas?

1)	The building is properly oriented to maximize natural daylight penetration	0.00
2)	High windows allow for deeper penetration of natural light in most learning areas	0.75
3)	Glare from direct sunlight is minimized through shading devices or overhangs in most cases	0.50
4)	Learning spaces contain a combination of direct and indirect artificial lighting, as well as task lighting where appropriate	0.75
5)	Artificial light fixtures in most indoor areas provide high Color Rendition Index to be as close to full-spectrum daylight as possible	0.75
Pattern Score		2.75

21 INSIDE/OUTSIDE CONNECTIONS

To what extent do interior spaces have views and vistas?

1)	All principal learning spaces (classrooms/learning studios) have windows to the outside	0.75
2)	All public spaces have direct connections to the outdoors	0.75
3)	There are outdoor seating areas directly adjacent to café/cafeteria	0.50
4)	School site contains outdoor learning spaces such as nature walks, amphitheater, kitchen gardens, and/or greenhouses	0.50
5)	Overhangs, shade and/or rain protection allow for transitioning to outdoor spaces	1.00
Pattern Score		3.50

22 NATURAL VENTILATION

What is the quality of natural ventilation?

1)	All learning areas have operable windows to allow in fresh air	0.50
2)	Cross ventilation exists in most rooms to allow for natural air flow, or adequate stack ventilation is available to most rooms to increase air movement	0.00
3)	Operable windows are located away from exhaust fans and parking lots	0.25
4)	School maintains good Indoor Air Quality by avoiding off-gassing and toxic materials and cleaning solutions, and properly vents copy stations and other areas where chemicals are regularly used	0.50
5)	Mechanical systems are designed for maximum fresh air intake (0.5) and automatic controls open windows in lieu of air-conditioning when appropriate (0.5)	0.25
Pattern Score		1.50

23 SUSTAINABILITY

To what extent has sustainability been considered in school design?

1)	Local indigenous materials are used in construction	0.00
2)	Water from the buildings/roof (0.5) and ground (0.5) is collected and used on site, minimizing erosion and water consumption	0.00
3)	Photovoltaic system or other energy meter programs provide teaching tool for science	0.25
4)	Landscaping is an integral part of school design (e.g. rain gardens and/or living machine) and manages stormwater infiltration on site	0.00
5)	Parking areas are designed to minimize runoff and are properly shielded from occupant use areas	0.00
Pattern Score		0.25

24	LOCAL SIGNATURE	
	To what extent does the facility design connect students to the culture, history, and ethos of the local neighborhood?	
1)	Visible signature represents mission of school or community at entry	0.50
2)	Local materials or architectural forms relate to surrounding context	0.50
3)	Space is provided for student display of local signature elements or school mission, such as murals or exhibits	0.00
4)	School itself brings character to the surrounding neighborhood	0.00
5)	Signature expressed both within and outside building such as landscaping or water elements	0.00
	Pattern Score	1.00
25	CONNECTED TO COMMUNITY	
	To what extent is the school connected to its surrounding community?	
1)	School is located within walking distance of at least 3 of the following: public transportation, parks, community gardens or rec facilities, public library, arts spaces, or after school programming	0.25
2)	There are specific and identifiable spaces within the school that can be easily used or reserved for community use on a regular basis	0.50
3)	School contributes unique resources to the community (meeting space, swimming pools, parking, etc.)	0.50
4)	There is adequate space for parents/caregivers to meet, greet, and engage with teachers and admin (0.5), and adequate space for parent/caregiver enrichment and wraparound services (0.5)	0.50
5)	There are places in the school for community to engage with, tutor, teach, or work with students during school hours	0.25
	Pattern Score	2.00
26	AESTHETICS	
	What is the quality of aesthetics?	
1)	First impression of school is that it feels open and welcoming, both during school and for after-hours users	0.25
2)	Within each learning environment there is at least one vertical surface that provides visual rest (is not cluttered or overstimulating)	0.25
3)	School makes use of a variety of floor, wall, and ceiling colors and textures (0.5); color scheme is not highly saturated and contrasting (e.g. primary colors), but is soft and comfortable (0.5)	0.75
4)	There is a variety in scale and size of spatial elements in most rooms	0.25
5)	Stimulating materials (pictures, posters, displayed learning materials) are ordered and organized by the physical environment	0.50
	Pattern Score	2.00
EFEI ASSESSMENT SCORE (out of 130 possible points)		55.50
ALBEMARLE HIGH SCHOOL		

Educational Facilities Effectiveness Instrument

School Name: Monticello High School
 School Division: Albemarle County Public Schools, Virginia
 Assessed by: C. Michael Ross, AIA, REFP and Lauren Perry, Assoc. AIA
 Date: 15-Aug-17

Each item evaluated is given a score of 0.0, 0.25, 0.5, 0.75, or 1.0. 0 = None; 1 = Ubiquitous

	Assessment Score
1 FLEXIBILITY	
How flexible are the principal learning spaces for differentiated learning?	
1) Principal learning spaces flexibility support multiple modes of learning	0.75
2) Enclosed learning spaces are flexible and have at least one break-out area within the room	0.50
3) Principal learning spaces allow students to independently access electronic and printed resources	0.50
4) Resource space for accelerated students and students with special-needs are integrated into principal learning areas	0.50
5) The learning environment can easily change in response to the learning activity	0.50
Pattern Score	2.75
2 MAKING EVERYWHERE	
How well does the learning environment in general promote making?	
1) Spaces for project building (e.g. makerspace, production room, etc.)	0.25
2) Ample display space for student projects	0.25
3) Making is visible to other students not in the same class	0.25
4) Collaborative 'think-tank' space is adjacent to messy work areas	0.25
5) There is a connection to the outdoors for experimentation	0.25
Pattern Score	1.25
3 TRANSPARENCY	
To what extent is learning visually transparent?	
1) Breakout spaces are supervisable from adjacent learning spaces	0.75
2) Teacher collaboration/work spaces have visual access to student learning spaces	0.25
3) There is visibility between learning studios and informal learning areas	0.50
4) There are views of learning activity from common spaces (e.g. cafes)	0.75
5) Majority of learning studios/classrooms, even when self-contained, have transparency to other indoor spaces	0.50
Pattern Score	2.75
4 CHOICE AND COMFORT	
How well do spaces support choice and comfort?	
1) Students can choose from a variety of seating sizes and options in Learning Studios	0.25
2) Furniture can easily be rearranged by students	0.25
3) Areas and furniture are available for student relaxation	0.25
4) Spaces are comfortable, inviting, and home-like (not institutional)	0.75
5) Large common spaces are zoned with different areas for students to find their comfort zone	0.25
Pattern Score	1.75
5 WATERING HOLE SPACE	
What is the quality of Watering Hole spaces?	
1) Students can meet socially at informal indoor gathering places	0.75
2) There are identifiable social gathering spaces on school grounds (outdoors)	0.25
3) Watering Hole spaces are not visually or acoustically disruptive to quiet learning spaces	0.25
4) Indoor social areas have vistas to nature or street life	0.75
5) Most Watering Hole spaces have flexible seating and soft seating available	0.25
Pattern Score	2.25

6 CAVE SPACE		
What is the quality of Cave spaces?		
1)	There are places for individual study, reflection and quiet reading within the Learning Community	1.00
2)	Cave spaces exist throughout school (e.g., library, waiting areas)	1.00
3)	There are small, identifiable areas for small group tutoring or study	1.00
4)	Cave spaces have natural light and vistas	1.00
5)	Cave spaces permit natural surveillance by adults while providing privacy for learner; these spaces promote a sense of safety and security for teachers and students	0.75
Pattern Score		4.75
7 UNIVERSAL DESIGN		
To what extent does the school provide for students of all abilities?		
1)	School provides equal access to all learning areas for students of different abilities	0.75
2)	Small-scaled rooms for student resources and interventions are integrated into the principal learning areas	1.00
3)	Learning spaces allow students to pursue a variety of options for meeting class requirements (text, speech, illustration, film, music, etc.) as best suits their needs and abilities	0.75
4)	A "safe room" or quiet space is available for students who become emotionally disturbed to prepare themselves to reenter the principal learning space	0.75
5)	Space is set aside for addressing the particular emotional and/or intellectual needs of individual students	0.25
Pattern Score		3.50
8 TECHNOLOGY		
How well is technology integrated with the curriculum and principal learning spaces?		
1)	Students can access mobile internet-connected computers throughout the day	1.00
2)	Wireless internet access throughout campus provides "Anytime Anywhere Learning"	1.00
3)	Digital interactive displays are availing in the majority of learning areas	0.50
4)	Spaces for collaboration with mobile technology are provided throughout the school	0.75
5)	Charging stations or adequate power outlets allow students to recharge mobile devices	0.25
Pattern Score		3.50
9 ACOUSTICS		
What is the quality of acoustics in principal learning areas?		
1)	Ambient noise level below 35dB (which studies have shown to correlate to higher student achievement)	0.25
2)	Reverberation Time in all learning areas, including informal learning spaces is suitable for speech presentations (usually below .6 seconds as measured RT60)	0.50
3)	Sound separation between enclosed learning spaces is adequate	0.50
4)	Noise level in learning studios and commons maintained by acoustical panels, soft fixtures and furnishings	0.25
5)	Noise distractions from other learning areas are minimal, and surrounding outside noise from traffic is within acceptable urban ambient range	0.75
Pattern Score		2.25
10 TEACHERS PROFESSIONAL SPACE		
To what extent does school create a professional environment for teachers?		
1)	Teachers share an office space used for collaboration, professional growth, independent work, informal discussion and relaxation	1.00
2)	Teachers have adequate space for private phone calls, family meetings and one-to-one student meetings	1.00
3)	Teacher workspace has digital display for presentation, as well as access to a printer or copier	0.50
4)	Teachers have individual workstations with lockable storage, phone, and internet access	1.00
5)	Teacher workspace offers adequate materials storage	1.00
Pattern Score		4.50
11 WELCOMING ENTRY		
How welcoming is the entrance to the school?		
1)	Clear visual cues to main entrance from parking and pedestrian paths	1.00
2)	Reception area for visitors is clearly visible from main entrance	1.00
3)	Visitor have a place to sit with access to beverages and reading materials	0.50
4)	Administration acts as "eyes on the street" and a welcoming presence at the main entry	0.75
5)	School name, identity / logo / mascot, and school news visible at entry	1.00
Pattern Score		4.25

12 SHARED LEARNING RESOURCES

To what extent are learning resources distributed versus centralized?

1)	A central library/media center serves as space for conducting research and a visible symbol for learning	1.00
2)	Library/media center has ample areas for casual reading, furnished with soft seating	1.00
3)	Access to digital resources are distributed throughout the school	0.75
4)	There is dedicated space to connect to distance learning, including group webcam, teleconferencing, and audio connections	0.50
5)	There are a mix of individual and group quiet study rooms for before, during, and after school work	0.50
Pattern Score		3.75

13 STUDENT-CRAFTED LEARNING

How extensive are student display spaces?

1)	Physical student work is displayed in changeable display systems in circulation spaces of the school	0.25
2)	Student work displayed at main entrance	0.25
3)	Special displays set aside for work in progress	0.25
4)	Digital student work displayed and refreshed throughout school	0.00
5)	Assigned displays for student work in curricular areas	0.00
Pattern Score		0.75

14 ARTS STUDIOS

How well equipped are art labs?

1)	Prep and storage areas with counters and sinks are available	0.75
2)	Large windows provide ample natural light and views	0.50
3)	There are connections to outdoors for messy projects	0.00
4)	There is space for a variety of art activities (drawing, sculpture, ceramics, etc.)	0.25
5)	There is specialty art equipment, such as a darkroom and a kiln	1.00
Pattern Score		2.50

15 MUSIC AND PERFORMANCE

To what extent is music and performance supported?

1)	There is an outdoor area or areas suitable for performance (outdoor piazza, amphitheater, etc.)	0.00
2)	Recording studio and equipment space for student-led projects	1.00
3)	Acoustically separated music practice rooms and space suitable for vocal group practice	0.50
4)	Performance space with stage suitable for instrumental and vocal performances	1.00
5)	Community able to use school facilities for larger performances AND/OR students use community facilities for larger performances	1.00
Pattern Score		3.50

16 HEALTH & PHYSICAL FITNESS

To what extent are health and physical fitness supported?

1)	Facilities available for organized sports (basketball, soccer, football, cricket, etc.)	1.00
2)	Age appropriate outdoor and indoor play spaces available	1.00
3)	Running track and/or nature trails are accessible to school site	1.00
4)	Secure bike storage facilities available for students and teachers, and safe crossings for children and adults entering the site on bike or foot	0.50
5)	Facilities available for personal fitness and health (e.g., yoga, dance, weights, ergo, walking)	0.25
Pattern Score		3.75

17 TOILET ROOMS

To what extent does the design of the bathroom meet needed standards of safety, privacy and cleanliness?

1)	Bathrooms are disconnected from the notion of an institutional environment; clean, hygienic, safe, well lit, cheerful	0.50
2)	Bathrooms are small and distributed throughout the school	1.00
3)	Each bathroom is located adjacent to a fully supervised commons area, such as those included within a Learning Community	0.75
4)	Restroom is decorated and personalized appropriately with student artwork, flowers, etc. and offers natural daylighting or borrowed natural light	0.00
5)	Stalls and urinals provide individual privacy.	1.00
Pattern Score		3.25

18 STUDENT DINING

To what extent is healthy and casual eating supported?

1)	School has a central kitchen/canteen or alternative fresh food provider	1.00
2)	School has indoor eating areas (0.5) and outdoor eating terraces (0.5)	1.00
3)	Students have access to fresh, healthy snacks throughout the day, such as fruits and vegetables	0.25
4)	School has multiple dining areas, for 150 students or less, with small round tables to support emotional learning and dining etiquette	0.00
5)	Main kitchen and café(s) double as learning areas for culinary arts and other learning (0.5) with demo area (0.5)	0.00
Pattern Score		2.25

19 SAFE LEARNING SPACES

How effectively does the school facility provide for the safety and security of students and teachers, and community?

1)	Main entrance is transparent and has visual access to the street (0.5); Administration located at the entrance offer "eyes on the street" passive supervision of all who enter and exit the school (0.5)	1.00
2)	Entry controls protect school safety without alienating students; entry controls promote a sense of community safety and responsibility	0.75
3)	School facility is well organized to promote safe and uncomplicated egress in emergency situations (0.5) and evacuation plans provide a safe meeting place outside of the school (0.5)	1.00
4)	Drop off zone provides easy access to a main entrance and eliminates conflict between student pedestrians and vehicle traffic	1.00
5)	Effective lighting illuminates all entrances and exits, blind corners, and pathways to public streets and spaces at night	0.75
Pattern Score		4.50

20 DAYLIGHTING AND ARTIFICIAL LIGHTING QUALITY

To what extent does natural daylight penetrate learning areas?

1)	The building is properly oriented to maximize natural daylight penetration	0.75
2)	High windows allow for deeper penetration of natural light in most learning areas	0.75
3)	Glare from direct sunlight is minimized through shading devices or overhangs in most cases	0.75
4)	Learning spaces contain a combination of direct and indirect artificial lighting, as well as task lighting where appropriate	1.00
5)	Artificial light fixtures in most indoor areas provide high Color Rendition Index to be as close to full-spectrum daylight as possible	0.00
Pattern Score		3.25

21 INSIDE/OUTSIDE CONNECTIONS

To what extent do interior spaces have views and vistas?

1)	All principal learning spaces (classrooms/learning studios) have windows to the outside	1.00
2)	All public spaces have direct connections to the outdoors	0.75
3)	There are outdoor seating areas directly adjacent to café/cafeteria	0.75
4)	School site contains outdoor learning spaces such as nature walks, amphitheater, kitchen gardens, and/or greenhouses	0.50
5)	Overhangs, shade and/or rain protection allow for transitioning to outdoor spaces	0.75
Pattern Score		3.75

22 NATURAL VENTILATION

What is the quality of natural ventilation?

1)	All learning areas have operable windows to allow in fresh air	0.75
2)	Cross ventilation exists in most rooms to allow for natural air flow, or adequate stack ventilation is available to most rooms to increase air movement	0.00
3)	Operable windows are located away from exhaust fans and parking lots	0.25
4)	School maintains good Indoor Air Quality by avoiding off-gassing and toxic materials and cleaning solutions, and properly vents copy stations and other areas where chemicals are regularly used	0.50
5)	Mechanical systems are designed for maximum fresh air intake (0.5) and automatic controls open windows in lieu of air-conditioning when appropriate (0.5)	0.25
Pattern Score		1.75

23 SUSTAINABILITY

To what extent has sustainability been considered in school design?

1)	Local indigenous materials are used in construction	0.00
2)	Water from the buildings/roof (0.5) and ground (0.5) is collected and used on site, minimizing erosion and water consumption	0.00
3)	Photovoltaic system or other energy meter programs provide teaching tool for science	0.50
4)	Landscaping is an integral part of school design (e.g. rain gardens and/or living machine) and manages stormwater infiltration on site	0.00
5)	Parking areas are designed to minimize runoff and are properly shielded from occupant use areas	0.00
Pattern Score		0.50

24 LOCAL SIGNATURE

To what extent does the facility design connect students to the culture, history, and ethos of the local neighborhood?

1)	Visible signature represents mission of school or community at entry	0.75
2)	Local materials or architectural forms relate to surrounding context	0.50
3)	Space is provided for student display of local signature elements or school mission, such as murals or exhibits	0.25
4)	School itself brings character to the surrounding neighborhood	0.50
5)	Signature expressed both within and outside building such as landscaping or water elements	0.00
Pattern Score		2.00

25 CONNECTED TO COMMUNITY

To what extent is the school connected to its surrounding community?

1)	School is located within walking distance of at least 3 of the following: public transportation, parks, community gardens or rec facilities, public library, arts spaces, or after school programming	0.00
2)	There are specific and identifiable spaces within the school that can be easily used or reserved for community use on a regular basis	0.75
3)	School contributes unique resources to the community (meeting space, swimming pools, parking, etc.)	0.50
4)	There is adequate space for parents/caregivers to meet, greet, and engage with teachers and admin (0.5), and adequate space for parent/caregiver enrichment and wraparound services (0.5)	0.75
5)	There are places in the school for community to engage with, tutor, teach, or work with students during school hours	0.25
Pattern Score		2.25

26 AESTHETICS

What is the quality of aesthetics?

1)	First impression of school is that it feels open and welcoming, both during school and for after-hours users	0.75
2)	Within each learning environment there is at least one vertical surface that provides visual rest (is not cluttered or overstimulating)	0.50
3)	School makes use of a variety of floor, wall, and ceiling colors and textures (0.5); color scheme is not highly saturated and contrasting (e.g. primary colors), but is soft and comfortable (0.5)	0.50
4)	There is a variety in scale and size of spatial elements in most rooms	0.75
5)	Stimulating materials (pictures, posters, displayed learning materials) are ordered and organized by the physical environment	0.50
Pattern Score		3.00

EFEI ASSESSMENT SCORE (out of 130 possible points)

MONTICELLO HIGH SCHOOL

74.25

Educational Facilities Effectiveness Instrument

School Name: Western Albemarle High School
 School Division: Albemarle County Public Schools, Virginia
 Assessed by: C. Michael Ross, AIA, REFP and Lauren Perry, Assoc. AIA
 Date: 15-Aug-17

Each item evaluated is given a score of 0.0, 0.25, 0.5, 0.75, or 1.0. 0 = None; 1 = Ubiquitous

	Assessment Score
1 FLEXIBILITY	
How flexible are the principal learning spaces for differentiated learning?	
1) Principal learning spaces flexibility support multiple modes of learning	0.50
2) Enclosed learning spaces are flexible and have at least one break-out area within the room	0.25
3) Principal learning spaces allow students to independently access electronic and printed resources	0.50
4) Resource space for accelerated students and students with special-needs are integrated into principal learning areas	0.25
5) The learning environment can easily change in response to the learning activity	0.25
Pattern Score	1.75
2 MAKING EVERYWHERE	
How well does the learning environment in general promote making?	
1) Spaces for project building (e.g. makerspace, production room, etc.)	0.25
2) Ample display space for student projects	0.00
3) Making is visible to other students not in the same class	0.00
4) Collaborative 'think-tank' space is adjacent to messy work areas	0.25
5) There is a connection to the outdoors for experimentation	0.25
Pattern Score	0.75
3 TRANSPARENCY	
To what extent is learning visually transparent?	
1) Breakout spaces are supervisable from adjacent learning spaces	0.00
2) Teacher collaboration/work spaces have visual access to student learning spaces	0.00
3) There is visibility between learning studios and informal learning areas	0.00
4) There are views of learning activity from common spaces (e.g. cafes)	0.00
5) Majority of learning studios/classrooms, even when self-contained, have transparency to other indoor spaces	0.00
Pattern Score	0.00
4 CHOICE AND COMFORT	
How well do spaces support choice and comfort?	
1) Students can choose from a variety of seating sizes and options in Learning Studios	0.50
2) Furniture can easily be rearranged by students	0.50
3) Areas and furniture are available for student relaxation	0.50
4) Spaces are comfortable, inviting, and home-like (not institutional)	0.50
5) Large common spaces are zoned with different areas for students to find their comfort zone	0.25
Pattern Score	2.25
5 WATERING HOLE SPACE	
What is the quality of Watering Hole spaces?	
1) Students can meet socially at informal indoor gathering places	0.75
2) There are identifiable social gathering spaces on school grounds (outdoors)	0.00
3) Watering Hole spaces are not visually or acoustically disruptive to quiet learning spaces	0.50
4) Indoor social areas have vistas to nature or street life	0.00
5) Most Watering Hole spaces have flexible seating and soft seating available	0.25
Pattern Score	1.50

6 CAVE SPACE		
What is the quality of Cave spaces?		
1)	There are places for individual study, reflection and quiet reading within the Learning Community	0.00
2)	Cave spaces exist throughout school (e.g., library, waiting areas)	0.25
3)	There are small, identifiable areas for small group tutoring or study	0.00
4)	Cave spaces have natural light and vistas	0.00
5)	Cave spaces permit natural surveillance by adults while providing privacy for learner; these spaces promote a sense of safety and security for teachers and students	0.25
Pattern Score		0.50
7 UNIVERSAL DESIGN		
To what extent does the school provide for students of all abilities?		
1)	School provides equal access to all learning areas for students of different abilities	0.50
2)	Small-scaled rooms for student resources and interventions are integrated into the principal learning areas	0.00
3)	Learning spaces allow students to pursue a variety of options for meeting class requirements (text, speech, illustration, film, music, etc.) as best suits their needs and abilities	0.25
4)	A "safe room" or quiet space is available for students who become emotionally disturbed to prepare themselves to reenter the principal learning space	0.25
5)	Space is set aside for addressing the particular emotional and/or intellectual needs of individual students	0.25
Pattern Score		1.25
8 TECHNOLOGY		
How well is technology integrated with the curriculum and principal learning spaces?		
1)	Students can access mobile internet-connected computers throughout the day	1.00
2)	Wireless internet access throughout campus provides "Anytime Anywhere Learning"	1.00
3)	Digital interactive displays are availing in the majority of learning areas	0.50
4)	Spaces for collaboration with mobile technology are provided throughout the school	0.50
5)	Charging stations or adequate power outlets allow students to recharge mobile devices	0.75
Pattern Score		3.75
9 ACOUSTICS		
What is the quality of acoustics in principal learning areas?		
1)	Ambient noise level below 35dB (which studies have shown to correlate to higher student achievement)	0.50
2)	Reverberation Time in all learning areas, including informal learning spaces is suitable for speech presentations (usually below .6 seconds as measured RT60)	0.50
3)	Sound separation between enclosed learning spaces is adequate	0.50
4)	Noise level in learning studios and commons maintained by acoustical panels, soft fixtures and furnishings	0.25
5)	Noise distractions from other learning areas are minimal, and surrounding outside noise from traffic is within acceptable urban ambient range	0.75
Pattern Score		2.50
10 TEACHERS PROFESSIONAL SPACE		
To what extent does school create a professional environment for teachers?		
1)	Teachers share an office space used for collaboration, professional growth, independent work, informal discussion and relaxation	0.75
2)	Teachers have adequate space for private phone calls, family meetings and one-to-one student meetings	0.50
3)	Teacher workspace has digital display for presentation, as well as access to a printer or copier	0.25
4)	Teachers have individual workstations with lockable storage, phone, and internet access	0.25
5)	Teacher workspace offers adequate materials storage	0.75
Pattern Score		2.50
11 WELCOMING ENTRY		
How welcoming is the entrance to the school?		
1)	Clear visual cues to main entrance from parking and pedestrian paths	0.25
2)	Reception area for visitors is clearly visible from main entrance	1.00
3)	Visitor have a place to sit with access to beverages and reading materials	0.50
4)	Administration acts as "eyes on the street" and a welcoming presence at the main entry	0.75
5)	School name, identity / logo / mascot, and school news visible at entry	0.25
Pattern Score		2.75

12 SHARED LEARNING RESOURCES

To what extent are learning resources distributed versus centralized?

1)	A central library/media center serves as space for conducting research and a visible symbol for learning	1.00
2)	Library/media center has ample areas for casual reading, furnished with soft seating	1.00
3)	Access to digital resources are distributed throughout the school	0.75
4)	There is dedicated space to connect to distance learning, including group webcam, teleconferencing, and audio connections	0.50
5)	There are a mix of individual and group quiet study rooms for before, during, and after school work	0.00
Pattern Score		3.25

13 STUDENT-CRAFTED LEARNING

How extensive are student display spaces?

1)	Physical student work is displayed in changeable display systems in circulation spaces of the school	0.25
2)	Student work displayed at main entrance	0.25
3)	Special displays set aside for work in progress	0.00
4)	Digital student work displayed and refreshed throughout school	0.00
5)	Assigned displays for student work in curricular areas	0.00
Pattern Score		0.50

14 ARTS STUDIOS

How well equipped are art labs?

1)	Prep and storage areas with counters and sinks are available	0.75
2)	Large windows provide ample natural light and views	0.00
3)	There are connections to outdoors for messy projects	0.00
4)	There is space for a variety of art activities (drawing, sculpture, ceramics, etc.)	0.75
5)	There is specialty art equipment, such as a darkroom and a kiln	0.75
Pattern Score		2.25

15 MUSIC AND PERFORMANCE

To what extent is music and performance supported?

1)	There is an outdoor area or areas suitable for performance (outdoor piazza, amphitheater, etc.)	0.00
2)	Recording studio and equipment space for student-led projects	0.50
3)	Acoustically separated music practice rooms and space suitable for vocal group practice	0.75
4)	Performance space with stage suitable for instrumental and vocal performances	1.00
5)	Community able to use school facilities for larger performances AND/OR students use community facilities for larger performances	1.00
Pattern Score		3.25

16 HEALTH & PHYSICAL FITNESS

To what extent are health and physical fitness supported?

1)	Facilities available for organized sports (basketball, soccer, football, cricket, etc.)	1.00
2)	Age appropriate outdoor and indoor play spaces available	1.00
3)	Running track and/or nature trails are accessible to school site	1.00
4)	Secure bike storage facilities available for students and teachers, and safe crossings for children and adults entering the site on bike or foot	0.00
5)	Facilities available for personal fitness and health (e.g., yoga, dance, weights, ergo, walking)	0.25
Pattern Score		3.25

17 TOILET ROOMS

To what extent does the design of the bathroom meet needed standards of safety, privacy and cleanliness?

1)	Bathrooms are disconnected from the notion of an institutional environment; clean, hygienic, safe, well lit, cheerful	0.50
2)	Bathrooms are small and distributed throughout the school	0.75
3)	Each bathroom is located adjacent to a fully supervised commons area, such as those included within a Learning Community	0.25
4)	Restroom is decorated and personalized appropriately with student artwork, flowers, etc. and offers natural daylighting or borrowed natural light	0.50
5)	Stalls and urinals provide individual privacy.	1.00
Pattern Score		3.00

18 STUDENT DINING

To what extent is healthy and casual eating supported?

1)	School has a central kitchen/canteen or alternative fresh food provider	1.00
2)	School has indoor eating areas (0.5) and outdoor eating terraces (0.5)	0.50
3)	Students have access to fresh, healthy snacks throughout the day, such as fruits and vegetables	0.25
4)	School has multiple dining areas, for 150 students or less, with small round tables to support emotional learning and dining etiquette	0.00
5)	Main kitchen and café(s) double as learning areas for culinary arts and other learning (0.5) with demo area (0.5)	0.00
Pattern Score		1.75

19 SAFE LEARNING SPACES

How effectively does the school facility provide for the safety and security of students and teachers, and community?

1)	Main entrance is transparent and has visual access to the street (0.5); Administration located at the entrance offer "eyes on the street" passive supervision of all who enter and exit the school (0.5)	0.50
2)	Entry controls protect school safety without alienating students; entry controls promote a sense of community safety and responsibility	0.75
3)	School facility is well organized to promote safe and uncomplicated egress in emergency situations (0.5) and evacuation plans provide a safe meeting place outside of the school (0.5)	0.75
4)	Drop off zone provides easy access to a main entrance and eliminates conflict between student pedestrians and vehicle traffic	0.25
5)	Effective lighting illuminates all entrances and exits, blind corners, and pathways to public streets and spaces at night	0.50
Pattern Score		2.75

20 DAYLIGHTING AND ARTIFICIAL LIGHTING QUALITY

To what extent does natural daylight penetrate learning areas?

1)	The building is properly oriented to maximize natural daylight penetration	0.00
2)	High windows allow for deeper penetration of natural light in most learning areas	0.00
3)	Glare from direct sunlight is minimized through shading devices or overhangs in most cases	0.00
4)	Learning spaces contain a combination of direct and indirect artificial lighting, as well as task lighting where appropriate	0.00
5)	Artificial light fixtures in most indoor areas provide high Color Rendition Index to be as close to full-spectrum daylight as possible	0.25
Pattern Score		0.25

21 INSIDE/OUTSIDE CONNECTIONS

To what extent do interior spaces have views and vistas?

1)	All principal learning spaces (classrooms/learning studios) have windows to the outside	0.25
2)	All public spaces have direct connections to the outdoors	0.25
3)	There are outdoor seating areas directly adjacent to café/cafeteria	0.25
4)	School site contains outdoor learning spaces such as nature walks, amphitheater, kitchen gardens, and/or greenhouses	0.50
5)	Overhangs, shade and/or rain protection allow for transitioning to outdoor spaces	0.75
Pattern Score		2.00

22 NATURAL VENTILATION

What is the quality of natural ventilation?

1)	All learning areas have operable windows to allow in fresh air	0.00
2)	Cross ventilation exists in most rooms to allow for natural air flow, or adequate stack ventilation is available to most rooms to increase air movement	0.00
3)	Operable windows are located away from exhaust fans and parking lots	0.00
4)	School maintains good Indoor Air Quality by avoiding off-gassing and toxic materials and cleaning solutions, and properly vents copy stations and other areas where chemicals are regularly used	0.50
5)	Mechanical systems are designed for maximum fresh air intake (0.5) and automatic controls open windows in lieu of air-conditioning when appropriate (0.5)	0.25
Pattern Score		0.75

23 SUSTAINABILITY

To what extent has sustainability been considered in school design?

1)	Local indigenous materials are used in construction	0.00
2)	Water from the buildings/roof (0.5) and ground (0.5) is collected and used on site, minimizing erosion and water consumption	0.00
3)	Photovoltaic system or other energy meter programs provide teaching tool for science	0.00
4)	Landscaping is an integral part of school design (e.g. rain gardens and/or living machine) and manages stormwater infiltration on site	0.00
5)	Parking areas are designed to minimize runoff and are properly shielded from occupant use areas	0.00
Pattern Score		0.00

24	LOCAL SIGNATURE	
	To what extent does the facility design connect students to the culture, history, and ethos of the local neighborhood?	
1)	Visible signature represents mission of school or community at entry	0.00
2)	Local materials or architectural forms relate to surrounding context	0.50
3)	Space is provided for student display of local signature elements or school mission, such as murals or exhibits	0.00
4)	School itself brings character to the surrounding neighborhood	0.00
5)	Signature expressed both within and outside building such as landscaping or water elements	0.00
	Pattern Score	0.50
25	CONNECTED TO COMMUNITY	
	To what extent is the school connected to its surrounding community?	
1)	School is located within walking distance of at least 3 of the following: public transportation, parks, community gardens or rec facilities, public library, arts spaces, or after school programming	0.00
2)	There are specific and identifiable spaces within the school that can be easily used or reserved for community use on a regular basis	0.75
3)	School contributes unique resources to the community (meeting space, swimming pools, parking, etc.)	0.50
4)	There is adequate space for parents/caregivers to meet, greet, and engage with teachers and admin (0.5), and adequate space for parent/caregiver enrichment and wraparound services (0.5)	0.75
5)	There are places in the school for community to engage with, tutor, teach, or work with students during school hours	0.25
	Pattern Score	2.25
26	AESTHETICS	
	What is the quality of aesthetics?	
1)	First impression of school is that it feels open and welcoming, both during school and for after-hours users	0.00
2)	Within each learning environment there is at least one vertical surface that provides visual rest (is not cluttered or overstimulating)	0.25
3)	School makes use of a variety of floor, wall, and ceiling colors and textures (0.5); color scheme is not highly saturated and contrasting (e.g. primary colors), but is soft and comfortable (0.5)	0.50
4)	There is a variety in scale and size of spatial elements in most rooms	0.25
5)	Stimulating materials (pictures, posters, displayed learning materials) are ordered and organized by the physical environment	0.50
	Pattern Score	1.50
EFEI ASSESSMENT SCORE (out of 130 possible points)		WESTERN ALBEMARLE HIGH SCHOOL
		46.75

Educational Facilities Effectiveness Instrument

School Name: Murray High School

School Division: Albemarle County Public Schools, Virginia

Assessed by: C. Michael Ross, AIA, REFP and Lauren Perry, Assoc. AIA

Date: 10-Aug-17

Each item evaluated is given a score of 0.0, 0.25, 0.5, 0.75, or 1.0. 0 = None; 1 = Ubiquitous

	Assessment Score
1 FLEXIBILITY	
How flexible are the principal learning spaces for differentiated learning?	
1) Principal learning spaces flexibility support multiple modes of learning	0.50
2) Enclosed learning spaces are flexible and have at least one break-out area within the room	0.50
3) Principal learning spaces allow students to independently access electronic and printed resources	0.50
4) Resource space for accelerated students and students with special-needs are integrated into principal learning areas	0.50
5) The learning environment can easily change in response to the learning activity	0.50
Pattern Score	2.50
2 MAKING EVERYWHERE	
How well does the learning environment in general promote making?	
1) Spaces for project building (e.g. makerspace, production room, etc.)	0.50
2) Ample display space for student projects	0.25
3) Making is visible to other students not in the same class	0.00
4) Collaborative 'think-tank' space is adjacent to messy work areas	0.25
5) There is a connection to the outdoors for experimentation	0.25
Pattern Score	1.25
3 TRANSPARENCY	
To what extent is learning visually transparent?	
1) Breakout spaces are supervisable from adjacent learning spaces	0.00
2) Teacher collaboration/work spaces have visual access to student learning spaces	0.00
3) There is visibility between learning studios and informal learning areas	0.00
4) There are views of learning activity from common spaces (e.g. cafes)	0.00
5) Majority of learning studios/classrooms, even when self-contained, have transparency to other indoor spaces	0.00
Pattern Score	0.00
4 CHOICE AND COMFORT	
How well do spaces support choice and comfort?	
1) Students can choose from a variety of seating sizes and options in Learning Studios	0.75
2) Furniture can easily be rearranged by students	0.75
3) Areas and furniture are available for student relaxation	0.75
4) Spaces are comfortable, inviting, and home-like (not institutional)	0.75
5) Large common spaces are zoned with different areas for students to find their comfort zone	0.25
Pattern Score	3.25
5 WATERING HOLE SPACE	
What is the quality of Watering Hole spaces?	
1) Students can meet socially at informal indoor gathering places	0.25
2) There are identifiable social gathering spaces on school grounds (outdoors)	0.25
3) Watering Hole spaces are not visually or acoustically disruptive to quiet learning spaces	0.50
4) Indoor social areas have vistas to nature or street life	0.25
5) Most Watering Hole spaces have flexible seating and soft seating available	0.50
Pattern Score	1.75

6 CAVE SPACE		
What is the quality of Cave spaces?		
1)	There are places for individual study, reflection and quiet reading within the Learning Community	0.00
2)	Cave spaces exist throughout school (e.g., library, waiting areas)	0.25
3)	There are small, identifiable areas for small group tutoring or study	0.00
4)	Cave spaces have natural light and vistas	0.25
5)	Cave spaces permit natural surveillance by adults while providing privacy for learner; these spaces promote a sense of safety and security for teachers and students	0.25
Pattern Score		0.75
7 UNIVERSAL DESIGN		
To what extent does the school provide for students of all abilities?		
1)	School provides equal access to all learning areas for students of different abilities	0.50
2)	Small-scaled rooms for student resources and interventions are integrated into the principal learning areas	0.00
3)	Learning spaces allow students to pursue a variety of options for meeting class requirements (text, speech, illustration, film, music, etc.) as best suits their needs and abilities	0.50
4)	A "safe room" or quiet space is available for students who become emotionally disturbed to prepare themselves to reenter the principal learning space	0.25
5)	Space is set aside for addressing the particular emotional and/or intellectual needs of individual students	0.25
Pattern Score		1.50
8 TECHNOLOGY		
How well is technology integrated with the curriculum and principal learning spaces?		
1)	Students can access mobile internet-connected computers throughout the day	1.00
2)	Wireless internet access throughout campus provides "Anytime Anywhere Learning"	1.00
3)	Digital interactive displays are availing in the majority of learning areas	0.50
4)	Spaces for collaboration with mobile technology are provided throughout the school	0.25
5)	Charging stations or adequate power outlets allow students to recharge mobile devices	0.00
Pattern Score		2.75
9 ACOUSTICS		
What is the quality of acoustics in principal learning areas?		
1)	Ambient noise level below 35dB (which studies have shown to correlate to higher student achievement)	0.25
2)	Reverberation Time in all learning areas, including informal learning spaces is suitable for speech presentations (usually below .6 seconds as measured RT60)	0.50
3)	Sound separation between enclosed learning spaces is adequate	0.50
4)	Noise level in learning studios and commons maintained by acoustical panels, soft fixtures and furnishings	0.25
5)	Noise distractions from other learning areas are minimal, and surrounding outside noise from traffic is within acceptable urban ambient range	0.75
Pattern Score		2.25
10 TEACHERS PROFESSIONAL SPACE		
To what extent does school create a professional environment for teachers?		
1)	Teachers share an office space used for collaboration, professional growth, independent work, informal discussion and relaxation	0.25
2)	Teachers have adequate space for private phone calls, family meetings and one-to-one student meetings	0.25
3)	Teacher workspace has digital display for presentation, as well as access to a printer or copier	0.25
4)	Teachers have individual workstations with lockable storage, phone, and internet access	0.25
5)	Teacher workspace offers adequate materials storage	0.25
Pattern Score		1.25
11 WELCOMING ENTRY		
How welcoming is the entrance to the school?		
1)	Clear visual cues to main entrance from parking and pedestrian paths	1.00
2)	Reception area for visitors is clearly visible from main entrance	0.25
3)	Visitor have a place to sit with access to beverages and reading materials	0.25
4)	Administration acts as "eyes on the street" and a welcoming presence at the main entry	0.50
5)	School name, identity / logo / mascot, and school news visible at entry	0.50
Pattern Score		2.50

12 SHARED LEARNING RESOURCES

To what extent are learning resources distributed versus centralized?

1)	A central library/media center serves as space for conducting research and a visible symbol for learning	0.25
2)	Library/media center has ample areas for casual reading, furnished with soft seating	0.50
3)	Access to digital resources are distributed throughout the school	0.75
4)	There is dedicated space to connect to distance learning, including group webcam, teleconferencing, and audio connections	0.50
5)	There are a mix of individual and group quiet study rooms for before, during, and after school work	0.00
Pattern Score		2.00

13 STUDENT-CRAFTED LEARNING

How extensive are student display spaces?

1)	Physical student work is displayed in changeable display systems in circulation spaces of the school	0.75
2)	Student work displayed at main entrance	0.25
3)	Special displays set aside for work in progress	0.00
4)	Digital student work displayed and refreshed throughout school	0.75
5)	Assigned displays for student work in curricular areas	0.75
Pattern Score		2.50

14 ARTS STUDIOS

How well equipped are art labs?

1)	Prep and storage areas with counters and sinks are available	0.75
2)	Large windows provide ample natural light and views	0.50
3)	There are connections to outdoors for messy projects	0.00
4)	There is space for a variety of art activities (drawing, sculpture, ceramics, etc.)	0.50
5)	There is specialty art equipment, such as a darkroom and a kiln	0.25
Pattern Score		2.00

15 MUSIC AND PERFORMANCE

To what extent is music and performance supported?

1)	There is an outdoor area or areas suitable for performance (outdoor piazza, amphitheater, etc.)	0.00
2)	Recording studio and equipment space for student-led projects	0.00
3)	Acoustically separated music practice rooms and space suitable for vocal group practice	0.00
4)	Performance space with stage suitable for instrumental and vocal performances	0.00
5)	Community able to use school facilities for larger performances AND/OR students use community facilities for larger performances	0.50
Pattern Score		0.50

16 HEALTH & PHYSICAL FITNESS

To what extent are health and physical fitness supported?

1)	Facilities available for organized sports (basketball, soccer, football, cricket, etc.)	0.50
2)	Age appropriate outdoor and indoor play spaces available	0.25
3)	Running track and/or nature trails are accessible to school site	0.50
4)	Secure bike storage facilities available for students and teachers, and safe crossings for children and adults entering the site on bike or foot	0.00
5)	Facilities available for personal fitness and health (e.g., yoga, dance, weights, ergo, walking)	0.25
Pattern Score		1.50

17 TOILET ROOMS

To what extent does the design of the bathroom meet needed standards of safety, privacy and cleanliness?

1)	Bathrooms are disconnected from the notion of an institutional environment; clean, hygienic, safe, well lit, cheerful	1.00
2)	Bathrooms are small and distributed throughout the school	1.00
3)	Each bathroom is located adjacent to a fully supervised commons area, such as those included within a Learning Community	0.25
4)	Restroom is decorated and personalized appropriately with student artwork, flowers, etc. and offers natural daylighting or borrowed natural light	1.00
5)	Stalls and urinals provide individual privacy.	1.00
Pattern Score		4.25

18 STUDENT DINING

To what extent is healthy and casual eating supported?

1)	School has a central kitchen/canteen or alternative fresh food provider	0.50
2)	School has indoor eating areas (0.5) and outdoor eating terraces (0.5)	0.00
3)	Students have access to fresh, healthy snacks throughout the day, such as fruits and vegetables	0.00
4)	School has multiple dining areas, for 150 students or less, with small round tables to support emotional learning and dining etiquette	0.00
5)	Main kitchen and café(s) double as learning areas for culinary arts and other learning (0.5) with demo area (0.5)	0.00
Pattern Score		0.50

19 SAFE LEARNING SPACES

How effectively does the school facility provide for the safety and security of students and teachers, and community?

1)	Main entrance is transparent and has visual access to the street (0.5); Administration located at the entrance offer "eyes on the street" passive supervision of all who enter and exit the school (0.5)	0.25
2)	Entry controls protect school safety without alienating students; entry controls promote a sense of community safety and responsibility	0.25
3)	School facility is well organized to promote safe and uncomplicated egress in emergency situations (0.5) and evacuation plans provide a safe meeting place outside of the school (0.5)	0.75
4)	Drop off zone provides easy access to a main entrance and eliminates conflict between student pedestrians and vehicle traffic	0.25
5)	Effective lighting illuminates all entrances and exits, blind corners, and pathways to public streets and spaces at night	0.50
Pattern Score		2.00

20 DAYLIGHTING AND ARTIFICIAL LIGHTING QUALITY

To what extent does natural daylight penetrate learning areas?

1)	The building is properly oriented to maximize natural daylight penetration	0.00
2)	High windows allow for deeper penetration of natural light in most learning areas	0.75
3)	Glare from direct sunlight is minimized through shading devices or overhangs in most cases	0.50
4)	Learning spaces contain a combination of direct and indirect artificial lighting, as well as task lighting where appropriate	0.75
5)	Artificial light fixtures in most indoor areas provide high Color Rendition Index to be as close to full-spectrum daylight as possible	0.50
Pattern Score		2.50

21 INSIDE/OUTSIDE CONNECTIONS

To what extent do interior spaces have views and vistas?

1)	All principal learning spaces (classrooms/learning studios) have windows to the outside	1.00
2)	All public spaces have direct connections to the outdoors	0.75
3)	There are outdoor seating areas directly adjacent to café/cafeteria	0.00
4)	School site contains outdoor learning spaces such as nature walks, amphitheater, kitchen gardens, and/or greenhouses	0.25
5)	Overhangs, shade and/or rain protection allow for transitioning to outdoor spaces	0.75
Pattern Score		2.75

22 NATURAL VENTILATION

What is the quality of natural ventilation?

1)	All learning areas have operable windows to allow in fresh air	0.75
2)	Cross ventilation exists in most rooms to allow for natural air flow, or adequate stack ventilation is available to most rooms to increase air movement	0.00
3)	Operable windows are located away from exhaust fans and parking lots	0.50
4)	School maintains good Indoor Air Quality by avoiding off-gassing and toxic materials and cleaning solutions, and properly vents copy stations and other areas where chemicals are regularly used	0.25
5)	Mechanical systems are designed for maximum fresh air intake (0.5) and automatic controls open windows in lieu of air-conditioning when appropriate (0.5)	0.25
Pattern Score		1.75

23 SUSTAINABILITY

To what extent has sustainability been considered in school design?

1)	Local indigenous materials are used in construction	0.50
2)	Water from the buildings/roof (0.5) and ground (0.5) is collected and used on site, minimizing erosion and water consumption	0.00
3)	Photovoltaic system or other energy meter programs provide teaching tool for science	0.00
4)	Landscaping is an integral part of school design (e.g. rain gardens and/or living machine) and manages stormwater infiltration on site	0.00
5)	Parking areas are designed to minimize runoff and are properly shielded from occupant use areas	0.00
Pattern Score		0.50

24 LOCAL SIGNATURE

To what extent does the facility design connect students to the culture, history, and ethos of the local neighborhood?

1)	Visible signature represents mission of school or community at entry	0.50
2)	Local materials or architectural forms relate to surrounding context	0.50
3)	Space is provided for student display of local signature elements or school mission, such as murals or exhibits	0.25
4)	School itself brings character to the surrounding neighborhood	0.00
5)	Signature expressed both within and outside building such as landscaping or water elements	0.00
Pattern Score		1.25

25 CONNECTED TO COMMUNITY

To what extent is the school connected to its surrounding community?

1)	School is located within walking distance of at least 3 of the following: public transportation, parks, community gardens or rec facilities, public library, arts spaces, or after school programming	0.75
2)	There are specific and identifiable spaces within the school that can be easily used or reserved for community use on a regular basis	0.50
3)	School contributes unique resources to the community (meeting space, swimming pools, parking, etc.)	0.25
4)	There is adequate space for parents/caregivers to meet, greet, and engage with teachers and admin (0.5), and adequate space for parent/caregiver enrichment and wraparound services (0.5)	0.25
5)	There are places in the school for community to engage with, tutor, teach, or work with students during school hours	0.25
Pattern Score		2.00

26 AESTHETICS

What is the quality of aesthetics?

1)	First impression of school is that it feels open and welcoming, both during school and for after-hours users	0.25
2)	Within each learning environment there is at least one vertical surface that provides visual rest (is not cluttered or overstimulating)	0.25
3)	School makes use of a variety of floor, wall, and ceiling colors and textures (0.5); color scheme is not highly saturated and contrasting (e.g. primary colors), but is soft and comfortable (0.5)	0.75
4)	There is a variety in scale and size of spatial elements in most rooms	0.50
5)	Stimulating materials (pictures, posters, displayed learning materials) are ordered and organized by the physical environment	0.50
Pattern Score		2.25

EFEI ASSESSMENT SCORE (out of 130 possible points)

MURRAY HIGH SCHOOL

48.00