LearningSCAPES 2019

Creativity. Curiosity. Imagination.

ASSOCIATION FOR
LEARNING
ENVIRONMENTS
Enhancing the Educational Experience

The Commission

- The Association for Learning Environments has designated the establishment of an independent commission to create, set policy for, and govern the ALEP program.
- The Accredited Learning Environment Planner (ALEP) is the professional designation of the Association and signifies excellence in the industry.
- The ALEP Commission shall consist of representatives of each geographical region of the Association and up to three subject matter experts that are designated by the Commission to serve.

What We Do

- Developed Core Competencies that define the Accreditation
- Uphold the standards of the ALEP
- Maintain Relevance of the ALEP
- Standardize the Process of the ALEP
- Assess the Candidates
- Increase the Value of the ALEP

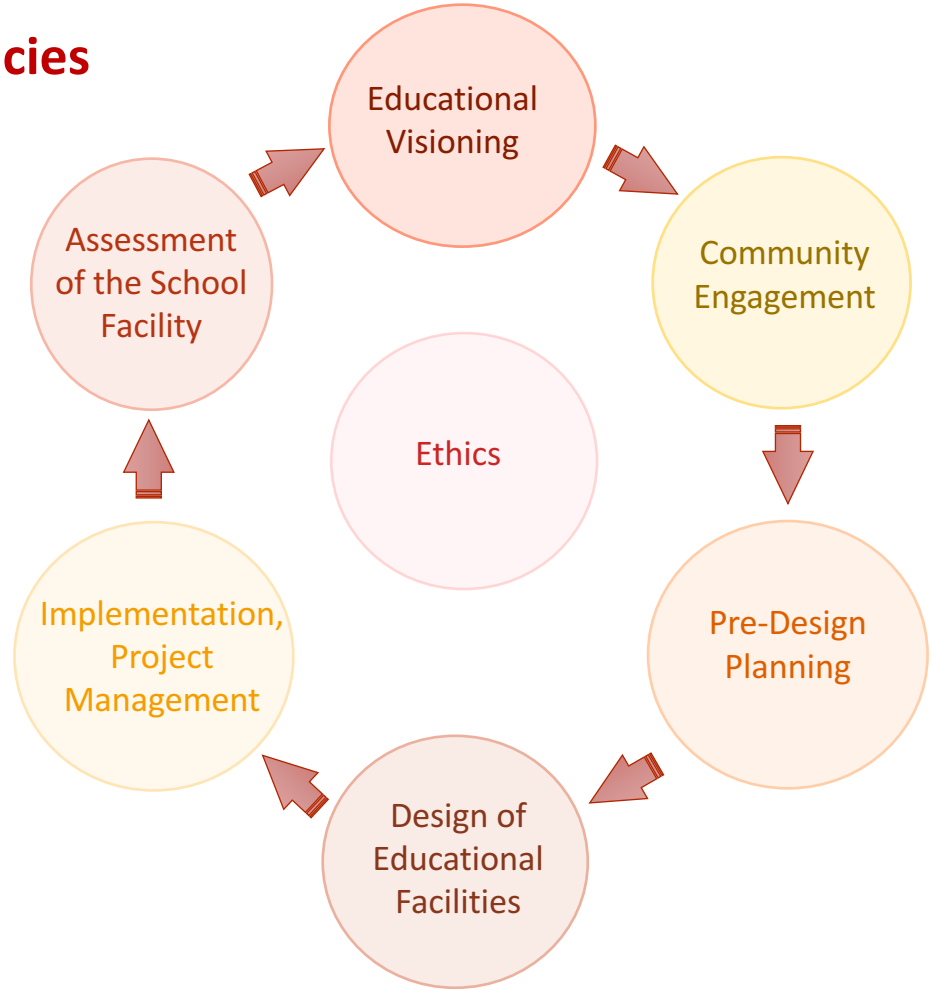
Two Pathways to Accreditation

1) Complete the Advanced Academy Certificate Program
   - Achieve at least an 80% achievement in each of the six modules
2) ALEP Assessment Process
   - Meet the Eligibility Requirements
   - Register and attest to the standards of the ALEP
   - Submit a Portfolio of your professional experience from the last 5 years
   - Document 100 hours of Continuing Education
   - Provide Letters of Recommendation
   - Interview with members of the Commission

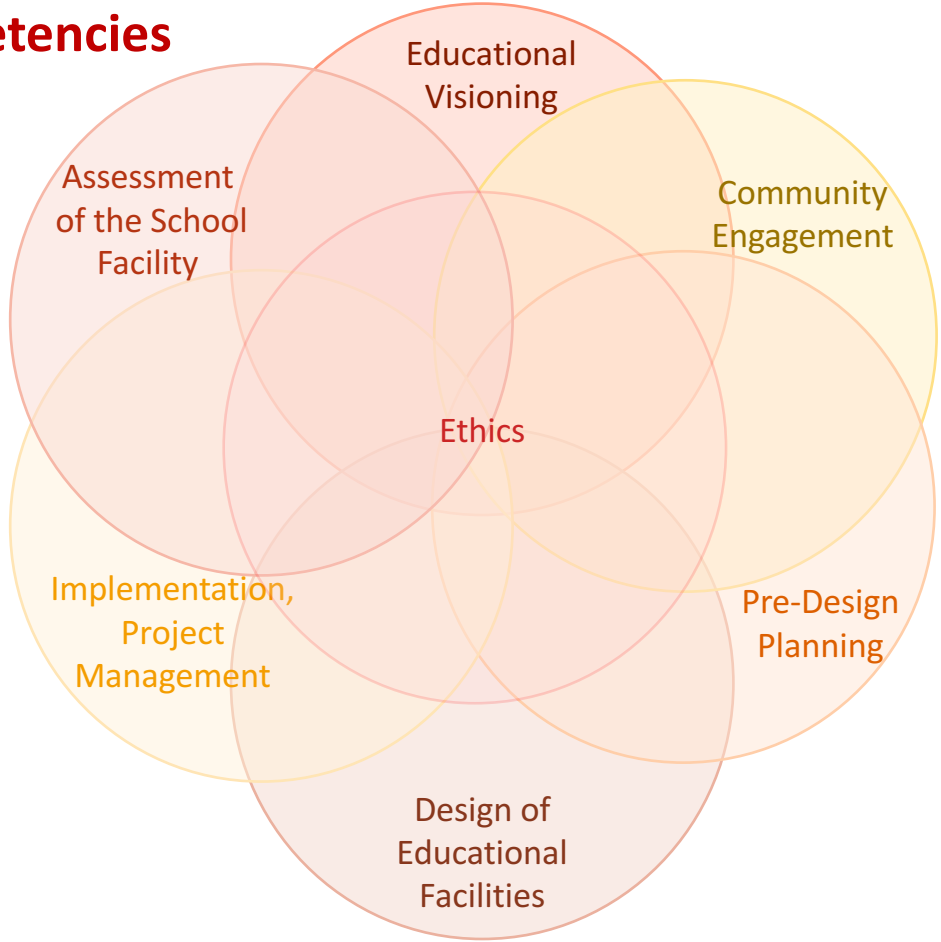
The Core Competencies

- Educational Visioning
- Community Engagement
- Educational Facility Pre-Design Planning
- Design of Educational Facilities
- Educational Facility Implementation, Project Management/ Project Delivery
- Assessment of the School Facility
- Ethics / Professionalism

7 Core Competencies



The Core Competencies



Educational Visioning

Exhibits an understanding of best and next practices related to educational leadership, programming, teaching, learning, planning and facility design.

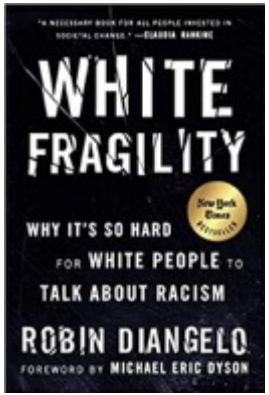
Establishes credibility with educators, community members and design professionals while conceiving and leading a community-based visioning process.

Demonstrates the ability to articulate the impact of learning environments on teaching and learning and uses that ability to facilitate a dialogue that uncovers the unique needs and long-range goals of an educational institution and its stakeholders – translating that into an actionable written/graphic program of requirements for the design practitioner.

Educational Visioning

Understanding Best Practices in Education

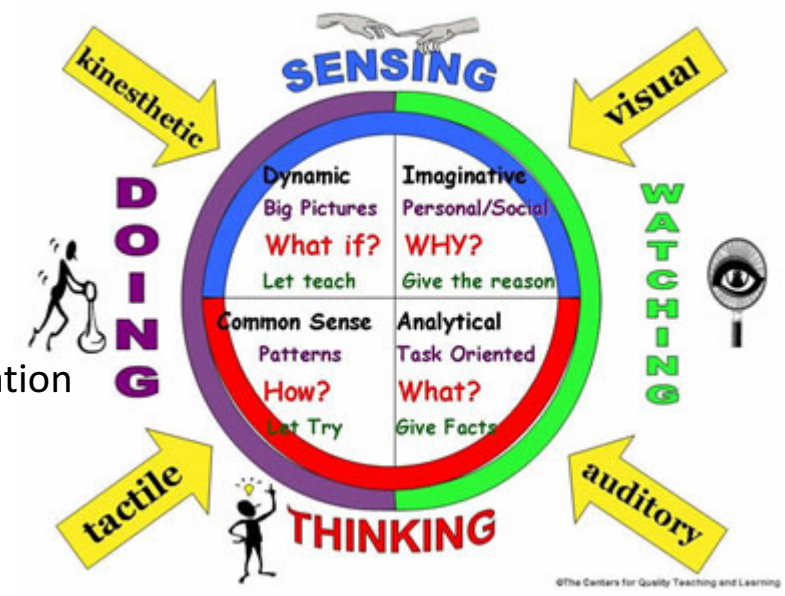
- Attend/participate in School Board/ Administrative Events
- Time in schools w/ teachers
- Volunteer work – tutoring, mentoring, etc
- Participation in continuing education
- Study/share current pedagogical practices



Educational Visioning

Understanding Best AND Next Practices

- What are schools of education teaching?
- Future trends in pedagogy
- Futurist visions of education's place in society
- Evolving technologies in education
- Learning occurs everywhere – what's happening outside the classroom



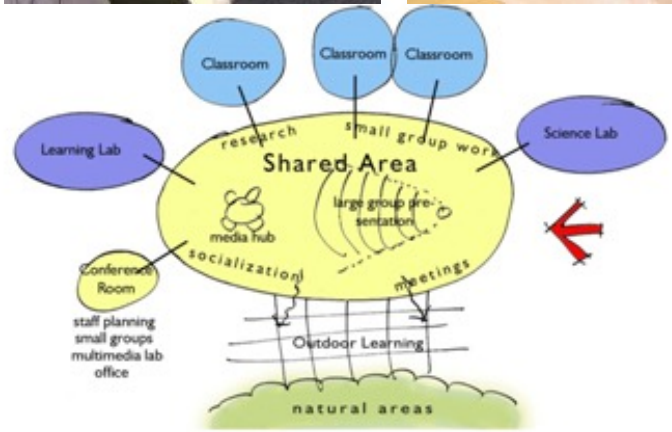
Educational Visioning

Establishing Credibility and Lead the Process

- Be a “known entity”: lecture, listen, lead, publish
- Share your body of work
- Practice empathy – view the world through another lens
- Build a clear and effective planning process
- Be a skilled facilitator

Educational Visioning

Actionable written/graphic program



Educational Visioning

Actionable written/graphic program

Goals

A Place for Children, Families & Community Connections

- An invitation to students, families and the community: You are welcome here
- A school that says to all children of all abilities: We knew you were coming
- A flagship of our future, a place for everyone
- A resource beyond the school day for students, families and the community
- A reflection of our FME community: We are less "other" and more "one"

Goals

A Focus on Child-Centered Learning for Life

- A school that affords opportunities for choice, both inside and out
- Building as an instrument for learning and play
- Design for learning spaces to have a gentle roar, infused with art, choice, and play
- Building supports time to slow down during the day
- Flexible places throughout the school that support flexible ways to learn throughout a student's life

Goals

An Opportunity for Play for Every Child

- Support opportunities for movement and play throughout the day: during learning, during transitions, at all times
- A focus on fun!
- A variety of places to play with a variety of ways to play, age appropriate for our youngest and oldest learners
- Places for structured, imaginary, and "rough and tumble" play both inside and out
- Connection to nature and places for nature play

Community Engagement

Leads community-wide research processes through group facilitation, strategic conversations, qualitative and quantitative surveys, along with board and administrative workshops to discover, articulate and communicate a community-based foundational vision that will form the basis of a plan for the design of learning environments.

Demonstrates the skill to resolve stakeholder issues while embedding a community's unique vision into the vision for its schools.

Community Engagement

TOPICS / KNOWLEDGE AREAS

- Communication
- Leadership
- Group Facilitation
- Qualitative Research
- Quantitative Research

Community Engagement

SKILLS

- Clearly and confidently communicates with users.
- Formulates potential courses of action to achieve objectives based on an in-depth understanding of the community and its values.
- Develops appropriate solutions based on the **unique values and vision of community**.
- Identifies potential implications of proposed policy options.
- Communicates to specific target audiences – end user groups, contractors, administrators, consultant teams as well as industry and community constituents.
- Prioritizes and clarifies direction for project scoping and selection as well as long range planning.
- Ability to conduct and lead planning meetings and **resolve different opinions and priorities** of project interest groups, departments or stakeholders to gain consensus for desired outcomes.
- Finds innovative solutions to resolve stakeholder issues without imposing personal or professional biases, but being able to embed community's vision into a vision for the facilities.

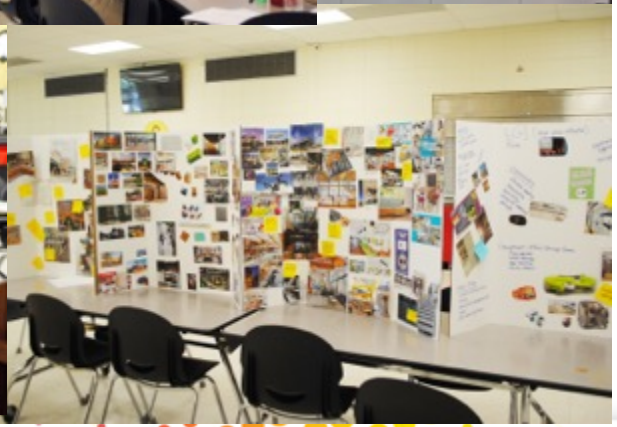
Community Engagement

TRAITS / CHARACTERISTICS

- Communicates in a manner which is clear, fluent and holds the audience's attention.
- Understands concerns of others and plans responses and reactions accordingly.
- **Anticipates challenges** and finds effective ways to address them.
- Effectively manages strong emotions in high pressure situations.
- Actively monitors personal preferences to stay open to community and user input.
- Builds and supports a balanced team that complement each other's strengths and weaknesses.
- Identifies potential issues and setbacks and guides team to optimize outcomes.
- Thorough knowledge of educational facility master planning and space usage with specific understanding of programming, design functionality, cost estimating, construction and project management.
- **Communicates a vision** that generates enthusiasm and commitment.
- Effectively negotiates with clients/stakeholders to achieve desired outcomes.
- Formulates and communicates public policy options and recommendations.

Community Engagement

LearningSCAPES 2019



Educational Facility Pre-Design Planning

- Manages a master planning process that combines educational planning, facilities assessment and utilization, demographic research, capital planning and educational specifications with a community-based vision to establish a plan for learning environments.
- Demonstrates the ability to translate existing or aspirational instructional models to specific programming and spatial relationships.

Educational Facility Pre-Design Planning

- Understanding of and experience with:
  - Master Planning
  - Capital Planning
  - Facility Assessment and Utilization
  - Demographics
  - Educational Specifications

Educational Facility Pre-Design Planning

LearningSCAPES 2019

Topics/Knowledge Areas

- Best Practices of Education, Planning, and Design
- Trends in Educational Planning & Theory
- Impact of Facilities on Teaching and Learning
- School Management
- Exemplary Projects
- Facility Design Trends
- Educational Technology
- Funding of Education

Skills

1. Ability to facilitate a dialogue to identify core needs and goals to define a successful project through a clear vision and mission.

2. Ability to diagnose a learning organization's needs and offer appropriate leadership and direction as required to build consensus for a shared vision.

3. Ability to align current thought on educational concepts from school management, curriculum and instructional delivery to physical space.

4. Aptitude for translating verbal description of a vision to a visual depiction.

Skills (continued)

5. Capacity to synthesize a graphic or verbal vision to articulate a written narrative.

6. Ability to translate community education program vision into language that is actionable for an architect. This involves connecting the architect and the educational community. It also means listening, distilling, refining the vision of the educational community and translating that vision for a designer.

7. Ability to resolve disagreements and to provide a clear path forward for learning communities.

Traits/Characteristics

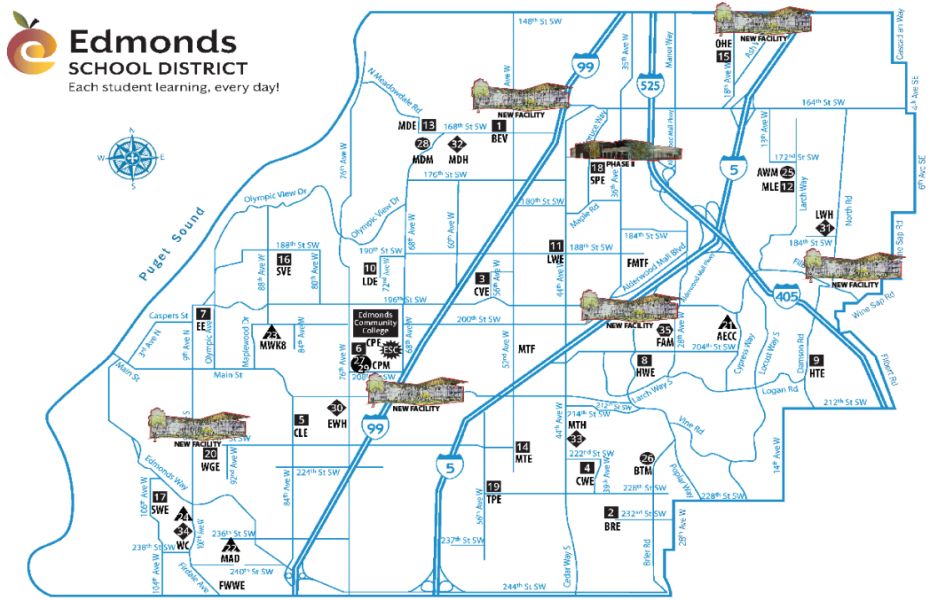
- Ability to build empathy with administrators, educators, staff, students and parents during the planning process.
- Judgement in determining whether a learning organization needs an expert to provide direction, a facilitator to provide support, a coach to provide guidance, or a manager who can delegate.
- Curiosity to understand the experience of district level, building level and classroom level educators, in the delivery of education from a planner's perspective.

Traits/Characteristics (continued)

- Commitment to carefully observe activities and experiences in school buildings and learning environments with district level leadership, educators, staff and students to gain a working understanding of the challenges faced by a learning community.
- Commitment to develop a working knowledge of educational culture and practice.
- Patience to listen and clearly document diverse opinions regarding educational needs and goals.

Educational Facility Pre-Design Planning

LearningSCAPES 2019



02/20/2018 - EJP Scenario 1r
Enrollment Capacity Summary

Alpha Sort

Edmonds SCHOOL DISTRICT

Capacity Values				2017 Attendance			2022 & 2027 Enrollment and Capacity Forecasts				
Grade Level	Quad	Attendance Area / 2018-19 portable count	Adj 2018 Capacity*	2017 Building Attend-ance	2017 Enroll/ Capacity w/ Portables	2017 Enroll/ Capacity No Portables	2017 attend/ residing %	2022 Enroll/ Capacity with portables	2027 Enroll/ Capacity with portables	2022 enroll-ment	2027 enroll-ment
ES	NW	Beverly - 5 portables	575	583	101.39%	128.18%	92.10%	106.68%	108.71%	613	625
ES	SE	Brier	456	455	99.78%	99.78%	86.17%	93.64%	99.21%	427	452
ES	NE	Cedar Valley	449	440	98.00%	98.00%	89.41%	107.58%	118.76%	483	533
ES	SE	Cedar Way - 2 portables	488	564	115.57%	128.18%	85.30%	116.27%	113.68%	567	555
ES	SW	Chase Lake	451	374	82.93%	82.93%	118.36%	78.99%	81.09%	356	366
ES	SW	College Place	504	499	99.01%	99.01%	84.01%	99.61%	109.01%	502	549
ES	NW	Edmonds	358	334	93.30%	93.30%	75.91%	98.81%	94.36%	354	338
ES	NE	Hazelwood -2 portables	519	488	94.03%	103.61%	92.78%	96.79%	99.03%	502	514
ES	NE	Hilltop -2 portables	562	525	93.42%	102.14%	93.58%	102.74%	107.40%	577	604
ES	NW	Lynndale	582	438	75.26%	75.26%	86.90%	78.54%	86.31%	457	502
ES	NE	New Lynnwood -2018	618	525	84.95%	84.95%	84.81%	114.46%	120.08%	707	742
ES	NE	Martha Lake	462	468	101.30%	101.30%	92.31%	106.09%	116.08%	490	536
ES	NW	Meadowdale	455	533	117.14%	117.14%	99.63%	106.99%	107.29%	483	488
ES	SE	New Mountlake Terrace 2018	486	402	82.72%	82.72%	91.16%	91.16%	97.91%	443	476
ES	NE	Oak Heights -6 portables	528	626	118.56%	168.02%	88.29%	144.81%	152.67%	760	806
ES	NW	Seaview	396	400	101.01%	101.01%	91.99%	93.93%	90.13%	368	357
ES	SW	Sherwood - 6 portables	526	531	100.95%	189.01%	77.86%	109.41%	98.43%	545	518
ES	NW	New Spruce - now 6 portables*	642	543	84.58%	109.04%	92.90%	94.26%	110.02%	605	706
ES	SE	Terrace Park (non-Challenge)	348	315	90.52%	90.52%	101.61%	103.95%	108.04%	362	376
ES	SW	Westgate - 5 portables	480	505	105.21%	140.28%	81.45%	113.86%	111.88%	547	537
		subtotal	9,885	9,550	96.61%	105.30%	88.67%	103.89%	107.20%	10,150	10,581
ES		Challenge (@ TP)	330	331			100.00%	100.00%	100.00%	330	330
ES		E-Learning	2	2			100.00%	100.00%	100.00%	0	0
ES		Edmonds Heights K-12	225	224			100.00%	100.00%	100.00%	225	225
ES		Madrona K-8	485	485			100.00%	100.00%	100.00%	485	485
ES		Maplewood K-8	375	373			100.00%	100.00%	100.00%	375	375
ES		SPED Contract/Unassigned	17	17			100.00%	100.00%	100.00%	0	0
ES		Out of District (attend multiple sites)		212						122	208
Elementary School Totals			11,319	11,194	98.90%	106.58%	103.94%	103.36%	107.77%	11,687	12,199

Educational Facility Pre-Design Planning

LearningSCAPES 2019

EDMONDS SCHOOL DISTRICT												
Potential School facilities for next bond issue	DRAFT 2 Evaluation Criteria and ratings - ICOS sort											
This version edited by:												
SCHOOL	Educational Suitability *	OSPI Condition Score (100 point scale - ICOS 2014)	2027 Enrollment vs Capacity w/ portables *	2027 Enrollment vs Capacity w/o portables*	Program space for intervention programs*	Separate Commons and Gym	Current covered play structure	2027 Enrollment vs Capacity w/ portables	2027 Enrollment vs Capacity w/o portables	2028 Enrollment vs Capacity w/ Gr6-8 MSs and one new ES***	Age in Years in 2020	Building Area (Square Feet)
College Place MS	P	75.41	G	G	P			71%	71%	TBD	50	86,790
Edmonds ES	P	76.86	G	G	P	N	N	94%	94%	90%	53	34,719
College Place ES	P	76.95	P	P	P	N		**109%**	**109%**	92%	51	50,017
Brier Terrace MS	F	78.74	G	G	P			84%	84%	TBD	51	88,527
Brier ES	P	79.68	F	F	P	N	N	99%	99%	87%	50	44,104
Oak Heights ES	P	81.76	U	UU	P	N		**153%**	**209%**	88%	53	51,653
Alderwood ECC	N/A	82.36	N/A	N/A	P	N		N/A	N/A		55	36,885
Hazelwood ES	P	83.46	F	P	P	N		99%	**109%**	88%	53	53,717
Hilltop ES	P	83.85	P	U	P	N		**107%**	**117%**	88%	52	51,400
Seaview ES	F	84.19	G	G	P		Partial	90%	90%	102%	59	50,551
Martha Lake ES	F	84.32	U	U	P	N	N	**116%**	**116%**	88%	28	50,092
Sherwood ES	P	84.95	F	U	P	N		98%	**136%**	102%	53	43,564
Westgate ES	P	85.19	U	U	P	N	N	**112%**	**149%**	109%	62	47,032
Beverly ES	P	85.76	P	U	P	N		**109%**	**137%**	97%	61	49,430
Woodway Campus	TBD	71.32**	N/A	N/A			N	N/A	N/A		53	148,484
Woodway ES	P	72.84**	N/A	N/A	P	N	N	N/A	N/A		58	37,075
Cedar Way ES	F	75.74**	U	U	P			**114%**	**126%**	101%	61	54,092
Spruce ES	TBD	N/A	P	U	P	TBD		**110%**	**142%**	88%	TBD	TBD
New NE Quad Elementary School										88%		
District-wide Elementary Capacity										**91%**		
Middle School #5												
New SLHS												
Early Childhood Learning Center												

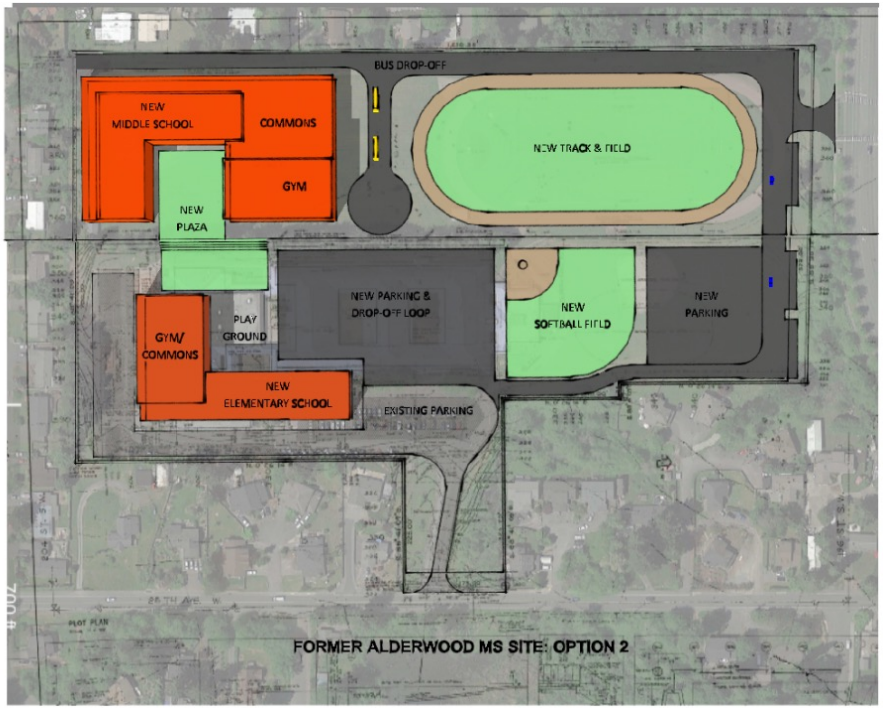
* E= Excellent, G = Good, F = Fair, P=Poor, U= Unsatisfactory

** Score needs to be updated to reflect major improvements since 2014

*** Assumes reboundarying ONLY NE Quad

Educational Facility Pre-Design Planning

LearningSCAPES 2019



Educational Facility Pre-Design Planning

LearningSCAPES 2019

Exemplary Projects

- Tour as many as feasible: physically, virtually
- Link to MacConnell Award Winners:

https://www.a4le.org/A4LE/Programs_Awards/Awards/LEsolutions_Planning_Design_Awards/MacConnell_Past_Winners.aspx

Design of Educational Facilities

An ALEP…

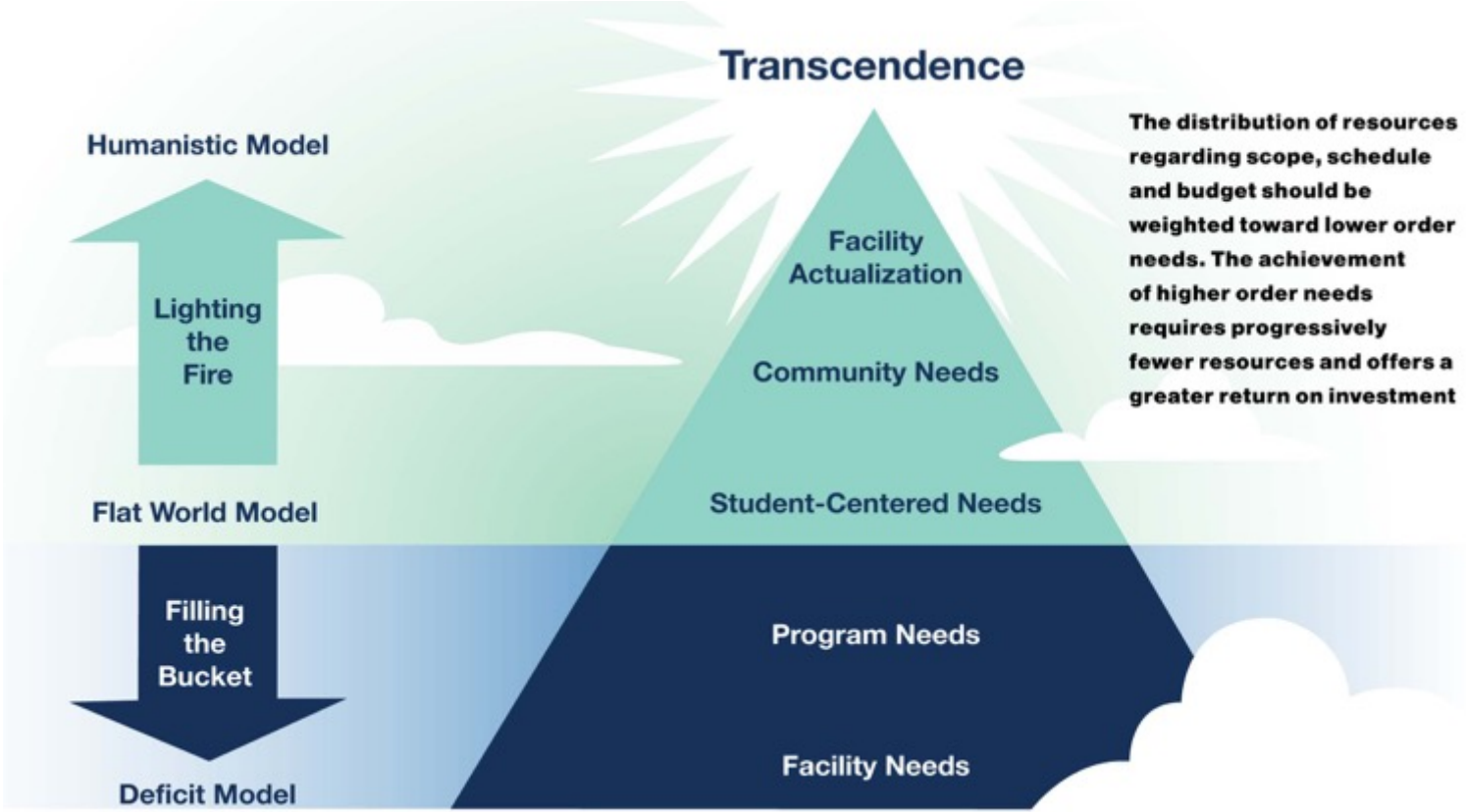
“Acts as a resource to the design team in providing ongoing guidance and support to ensure that the emerging and ultimate design aligns with the established community vision, education goals, future programming, written design standards, best/next practices and education policy.”

Design of Educational Facilities

What needs to be demonstrated:

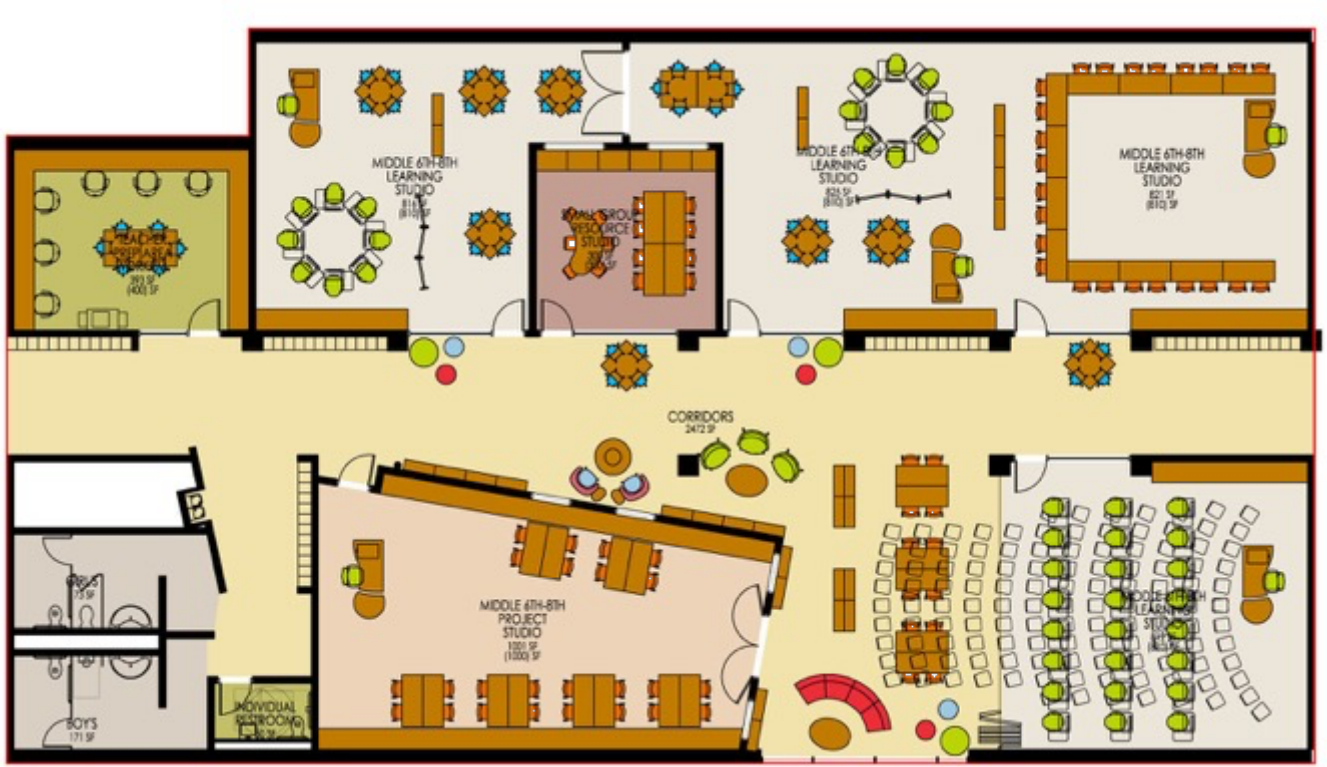
- Ability to integrate the input from education leadership, public and educators into the planning process to ensure the input received guided the resulting solutions.
- An understanding of the distinct relationship between the school's education goals and design standards, and the final design solution.
- Demonstrate an understanding of how a project’s aesthetic expression may align with a community's values and vision.

Design of Educational Facilities



LearningSCAPES 2019

Next Generation Planning Concepts

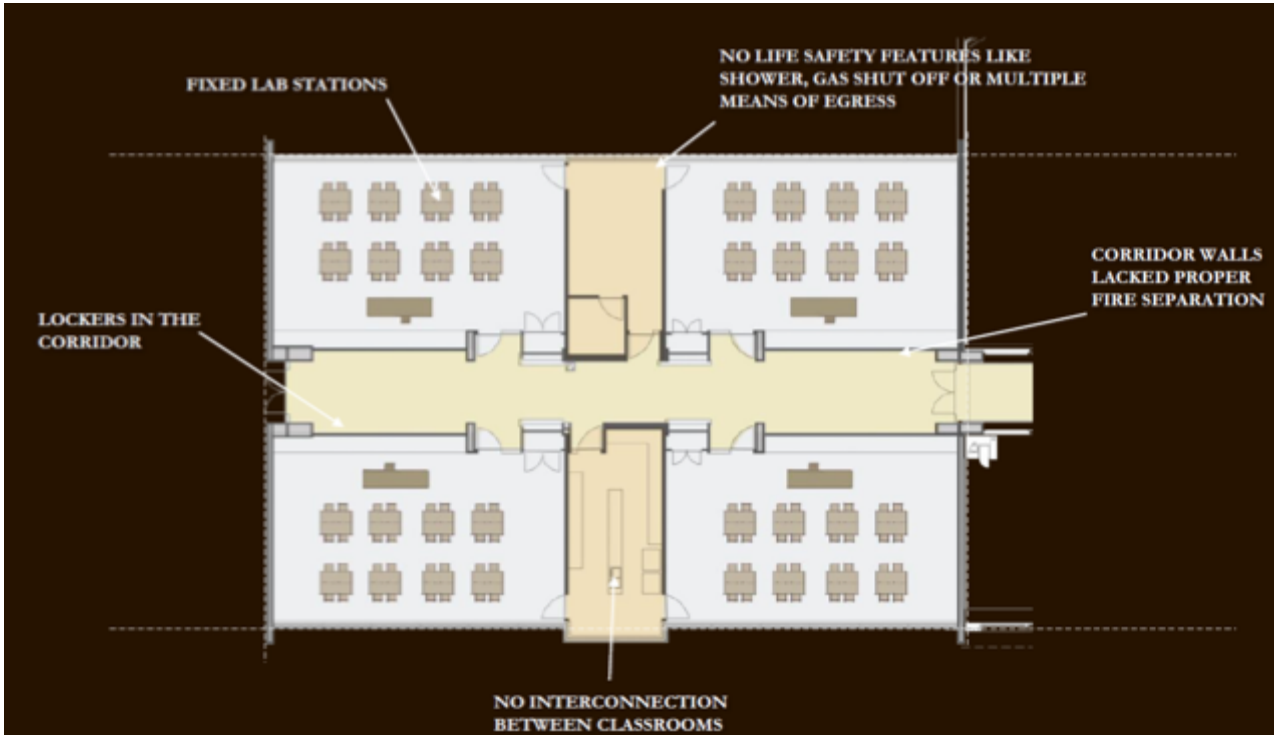


Next Generation Science Standards

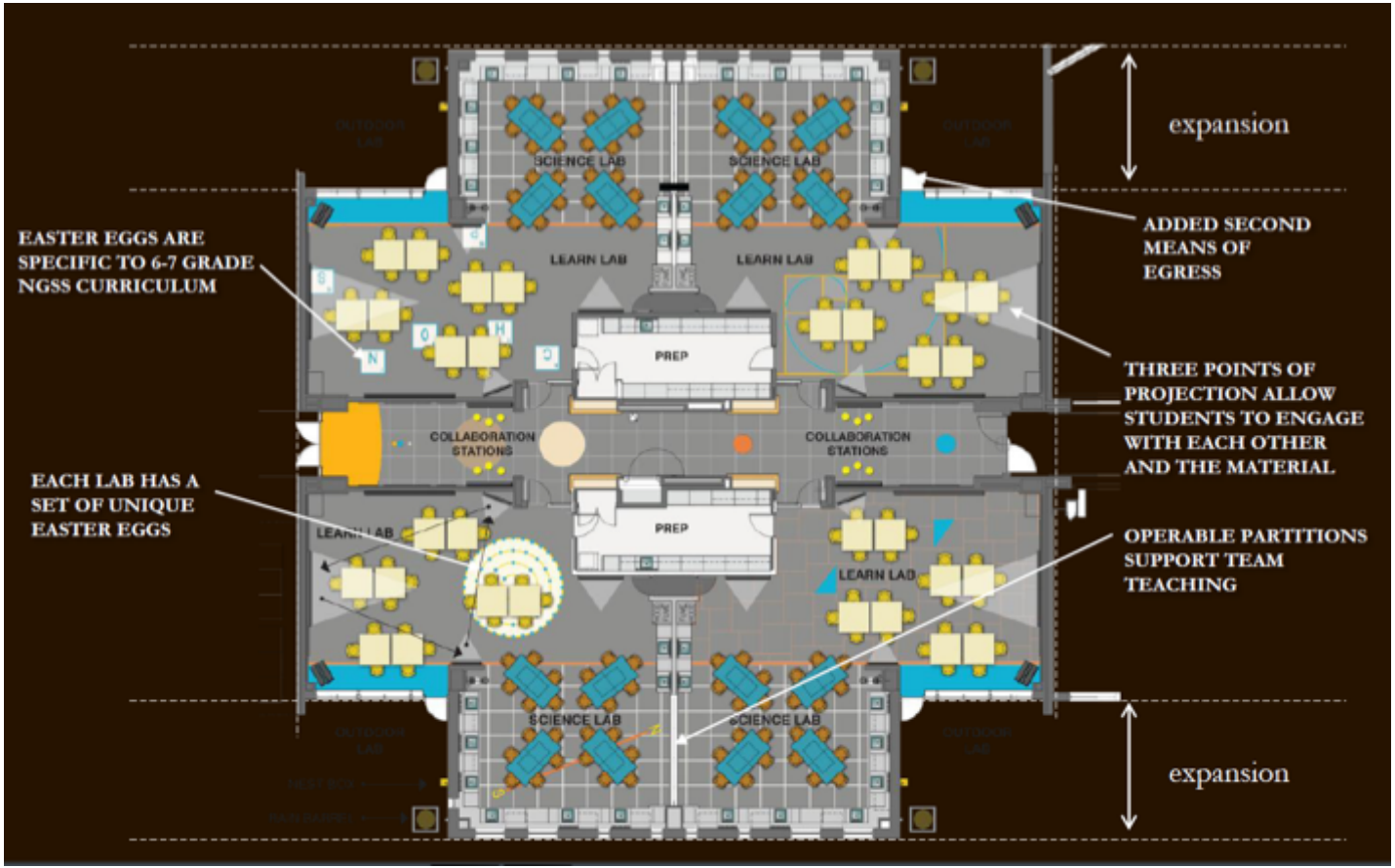
Crosscutting Concepts

1. Patterns
2. Cause and Effect
3. Scale, Proportion & Quantity
4. Systems and System Models
5. Energy and Matter
6. Structure and Function
7. Stability and Change

Floor Plan Before



Floor Plan After



LearningSCAPES 2019

Traditional Corridor

Learning Corridor

1960's Era Science Lab

Next Generation Science Lab

Educational Facility Implementation, Project Management/Project Delivery

Has a working understanding of how the following areas impact the facility program:

- Regulations and Policies
- Project Delivery Methodologies
- Scheduling
- Preventative Maintenance
- Life-cycle Planning
- Systems Commissioning

Educational Facility Implementation, Project Management/Project Delivery

LearningSCAPES 2019

TOPICS / KNOWLEDGE AREAS

- Project Delivery Methods
- Project Costs & Budgeting
- Project Scheduling
- Facility Operations & Maintenance
- Project Evaluation
- Commissioning

Educational Facility Implementation, Project Management/Project Delivery

SKILLS

- Has understanding of projects potential risks and the ability to anticipate and mitigate risks where possible for acceptable project outcomes.
- Understanding of regulations and codes impacting a facility program including working with local jurisdiction authorities.
- Has knowledge and understanding of available project delivery methods.
- Understanding of core principles of Critical Path Scheduling.
- Understands facility maintenance requirements, preventive maintenance and long term life cycle cost approaches to maintenance planning.

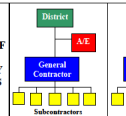
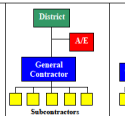
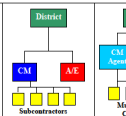
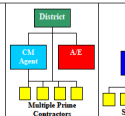
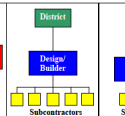
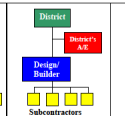
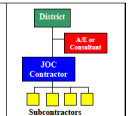
Educational Facility Implementation, Project Management/Project Delivery

TRAITS / CHARACTERISTICS

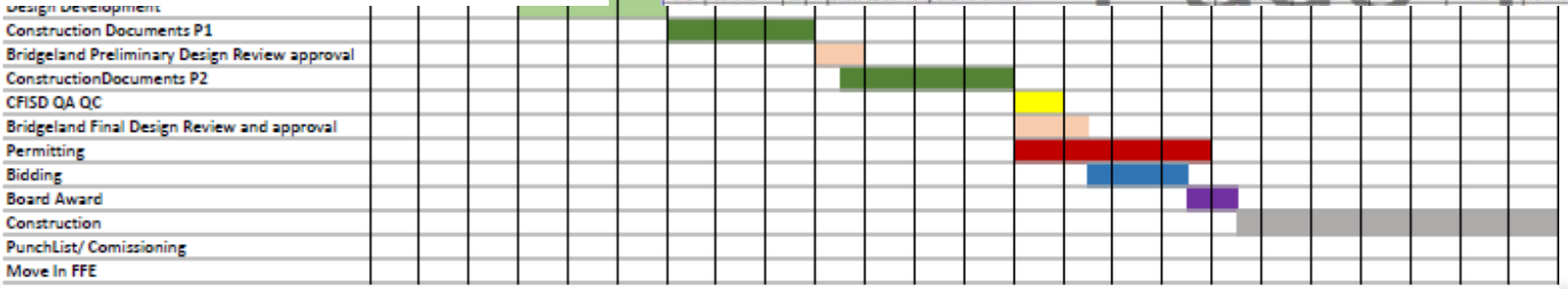
- Implements complex strategies to build buy-in and support from key internal and external clients or stakeholders.
- Quickly sums up complex options and recommends a clear way forward; monitors overall project performance against project plans and goals.
- Ability to apply knowledge of various construction delivery methods to identify the best value delivery method for given project circumstances.
- Ability to develop or identify alternative / creative approaches for scheduling and project delivery to achieve overall project goals.
- Empathetic to end users needs from students, instructional and administrative staff as well as operations staff and ability to develop solutions that meet sometimes competing demands from the various end user groups.

Educational Facility Implementation, Project Management/Project Delivery

LearningSCAPES 2019

MATRIX OF PROJECT DELIVERY METHODS							
Legislative Term	Competitive Bidding	Competitive Sealed Proposals	Request for Proposal	Request for Proposals	Design/Build	Design/Build	Job Order Contracting
Industry Term	Traditional Process, Hard Bid Lump Sum or Stipulated Sum	Traditional Process, Hard Bid Lump Sum or Stipulated Sum	Construction Manager at Risk	Construction Management, Agency	Design/Build	Bridging	Delivery Order Contracting, Job Order Contracting, SABER, Fast Track Construction, Work Order Requirements Contract
Definition	A delivery method wherein the District selects an architect, engineer to design and develop construction documents from which the District solicits lump sum bids. Selection is based on the lowest possible bid and the contractor serves as a single point of responsibility for construction.	A delivery method similar to competitive bidding. The District selects an architect, engineer to design and develop construction documents. Once documents are fully complete the District solicits sealed proposals. Selection is based on a combination of price and other factors that the District deems provide best value.	A method where the construction manager serves as the general contractor providing pre-construction and construction services. The Construction Manager at Risk provides Design phase consultation in evaluating cost, schedules, implications of alternative designs, systems and materials during design and serves as a single point of responsibility contracting directly with the subcontractors during construction.	A method where the construction manager serves as an agent for the District providing pre-construction and construction services. The Construction Manager, Agent provides Design phase consultation but holds no subcontracts nor provides project bonding for the construction. The multiple trade contracts are held by the District. Selection is based on the proposal offering the best value to the District.	A method where a single entity is contracted to provide both design and construction. The Design/Build team consist of contractor, engineer and architect. The Design/Builders contracts directly with the subcontractors and is responsible for delivery of the project. Selection is based on the proposal offering the best value to the District.	A form of Design/Build where the District selects an architect, engineer to prepare the "design criteria package" which is more comprehensive and enables a District to receive competitive proposals from the Design/Build teams.	Job Order Contracting is a process for contracting for the minor repair, rehabilitation, or renovation of facilities when the work is of a recurring nature but the delivery times, type and quantities of work required are indefinite.
Pros	• Familiar delivery method • Defined project scope • Single point of responsibility for construction • Open aggressive bidding	• Selection flexibility • Defined project scope • Single point of responsibility for construction	• Selection flexibility • Design phase assistance • Single point of responsibility for construction • Team concept • Faster schedule delivery • Change flexibility • Adversarial relationship reduced	• Selection flexibility • Design phase assistance • Faster schedule delivery • Change flexibility • Non-adversarial relationship	• Selection flexibility • Single point of responsibility for design and construction • Team concept • Faster schedule delivery	• Single point of responsibility for construction • Faster schedule delivery • Enhanced scope definition • Builder/architect/engineer team relationship	• Fast response • Reduced changes • Reduced "up-front" time and cost • Incentive for higher quality • Puts more money in local business • Up front involvement of the contractor facilities concurrent performance of design and execution
Cons	• No design phase assistance • Longer schedule duration • Price not established until bidding is complete • Adversarial relationship • Lack of flexibility for change	• No design phase assistance • Longer schedule duration • Price not established until bidding is complete • Adversarial relationship	• Difficulty for District to evaluate GMP until all subcontract bids are completed.	• No single point of responsibility • No guaranteed price • District must manage more contracts •	• Less of check and balance • More difficult for District to manage • Potential adversarial relationship between District and Design/Builder	• Less of check and balance • More difficult method to manage • Adversarial relationship between District's architect/engineer and Design/Build architect/engineer	• Perception of threat to "in-house" work force or local business • Requires teamwork to reach potential • Need trained personnel on District staff, or provided by a consultant, to best administer contract.
Best Suited	New projects that are not schedule sensitive nor subject to potential change.	New projects that are not schedule sensitive nor subject to potential change.	Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.	Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.	New or renovation projects that are schedule sensitive.	Larger new or renovation projects that are schedule sensitive and difficult to define.	Schedule sensitive, multi-trade, minor repair, alteration or renovation projects.
Least Suited	Complex projects that are sequence or schedule sensitive. Projects subject to potential change.	Complex projects that are sequence or schedule sensitive. Projects subject to potential change.	Smaller projects.	Smaller projects.	Projects that are difficult to define and are less schedule sensitive.	Smaller projects and those projects subject to change.	Single trade simple projects or very small projects.

RFI #	DATE ISSUED	HS	ES	BRIEF DESCRIPTION	DIRECTED TO:	Days Open	Days Open from Issue to Today	Days Open from Issue to response	
001	2015-08-19	X		Elevator B114 won't work as drawn	IBI	2	1500	2	Change to In-Groun
002	2015-09-03	X		Dugout Framing	IBI/CJG	5	1485	5	Refer to RFI
003	2015-09-03	X		Bleaching fencing material	IBI	1	1485	1	Install per contract
004	2015-09-10	X		Detail 18/S8.01 - Galvanized angle necessary	IBI/CJG	12	1478	12	Delete the Galvanz S8.01. It will not be issued to credit the support angles in D
005	2015-09-10	X		Detail 9/S7.01 - Field weld angle to beam	IBI/CJG	11	1478	11	Yes, the clip angle field applied
006	2015-09-10	X		Detail 20/S7.01 - Elevation of partition channel	IBI/CJG	12	1478	12	The General Contra partition support ch requirements. The architectural drawin
007	2015-09-10	X		Column E 3/5.3 - Need column size (reference sheet S1.13)	IBI/CJG	11	1478	11	The column at E 3/
008	2015-09-10	X		Detail 5/S9.01 - tree column locations	IBI/CJG	14	1478	14	All three columns s spaced 2'-6" apart A the column is set b Floor Framing Plan
009	2015-09-10	X		Sheet S2.17 - TOS for select HSS	IBI/CJG	14	1478	14	The section was mi 9/S8.02 to 1/S7.04 0" as shown in the
009r	2015-10-28	X		CLARIFICATION REQUESTED Sheet S2.17 - TOS for select HSS	CJG	7	1430	7	TOS elevation for H
010	2015-09-11	X		Sheet S3.02 and S/S7.03 - Offset at beam along column line 1 BB	IBI/CJG	14	1477	14	See attached sketc only. Other areas
011	2015-09-11	X		Sheets S2.06 and S2.11 - Beam size along column line PP.2	IBI/CJG	10	1477	10	The correct beam s
012	2015-09-11	X		Sheet S2.06 - verify channel elevation	IBI/CJG	17	1477	17	Refer to sketch



Assessment of the School Facility

- The ability to objectively evaluate a learning environment **post-occupancy** and utilize that data to improve future projects.
- Implements a plan for **educational commissioning** that provides guidance on how to use and maximize the learning environment to meet the foundational vision established in the planning phase.

Assessment of the School Facility

Topics/Knowledge Areas

- Educational Commissioning
- Commissioning
- Project Evaluation
- Post-occupancy Evaluation

Assessment of the School Facility

Challenges and Strategies

- Owners may not contract for Post-Occupancy Assessments
- Formal vs. Informal Assessments
- Post-Occupancy surveys may raise expectations
- Continuous process

Facility Assessment and Utilization

A skill necessary to:

to **evaluate** the effectiveness of past investment

to **inform** future investment

Quantitative and Qualitative Assessments

Quantitative

aspects include:

- Area per student
- Space Utilization
- Operational Cost / sf
- # of parking spaces
- # of doors
- Etc

Qualitative

aspects include:

- Material conditions
- Safety and Security
- Educational Adequacy
  - Adjacencies
  - Types of spaces
  - Connectivity

Assessment Example (Quantitative)

Totals

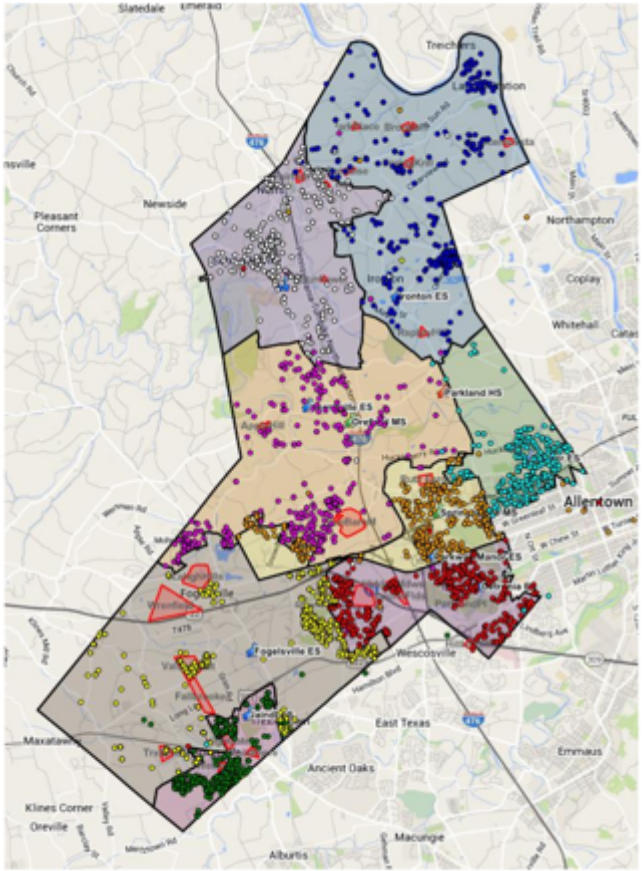
Grade	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
K	514	505	511	509	523	541	561	586	600	608	616	620	629	632
1	598	588	601	613	615	636	658	686	700	710	716	721	730	733
2	658	625	629	620	650	657	684	714	716	724	732	738	747	750
3	651	676	642	657	646	684	695	729	740	736	743	749	757	761
4	716	667	696	663	685	680	720	739	753	756	753	759	767	771
5	737	728	682	705	680	707	705	753	754	765	770	761	770	774
Subtotals:	3874	3789	3761	3767	3799	3905	4023	4207	4263	4299	4330	4348	4400	4421
Pct Chg:		-2.2%	-0.7%	0.2%	0.8%	2.8%	3%	4.6%	1.3%	0.8%	0.7%	0.4%	1.2%	0.5%
SDC:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:	3874	3789	3761	3767	3799	3905	4023	4207	4263	4299	4330	4348	4400	4421
Capacity:	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680
Open Seats:	806	891	919	913	881	775	657	473	417	381	350	332	280	259

Totals

Grade	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
6	731	760	738	723	746	725	754	758	799	794	804	806	802	806
7	792	744	780	753	744	773	752	788	775	813	807	816	820	812
8	770	808	752	788	768	761	791	773	800	784	821	813	823	825
Subtotals:	2293	2312	2270	2264	2258	2259	2297	2319	2374	2391	2432	2435	2445	2443
Pct Chg:		0.8%	-1.8%	-0.3%	-0.3%	0%	1.7%	1%	2.4%	0.7%	1.7%	0.1%	0.4%	-0.1%
SDC:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:	2293	2312	2270	2264	2258	2259	2297	2319	2374	2391	2432	2435	2445	2443
Capacity:	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656	2656
Open Seats:	363	344	386	392	398	397	359	337	282	265	224	221	211	213

Parkland HS

Grade	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
9	784	804	822	785	827	809	801	839	812	836	819	857	851	850
10	792	772	781	806	776	822	807	804	839	809	831	812	853	844
11	781	790	750	768	797	772	822	813	805	836	805	827	811	847
12	731	757	770	744	755	785	762	813	805	797	827	797	819	801
Subtotals:	3088	3123	3123	3103	3155	3188	3192	3269	3261	3278	3282	3293	3334	3350
Pct Chg:		1.1%	0%	-0.6%	1.7%	1%	0.1%	2.4%	-0.2%	0.5%	0.1%	0.3%	1.2%	0.5%
SDC:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:	3088	3123	3123	3103	3155	3188	3192	3269	3261	3278	3282	3293	3334	3350
Capacity:	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313	3313
Open Seats:	225	190	190	210	158	125	121	44	52	35	31	20	-21	-37



Assessment Example (Quantitative)

Cetronia	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-6.6%	-0.8%	-0.2%	2.3%	9.5%	7.9%	8.3%	2.1%	0.3%	-0.1%	0.3%	0.3%	0.6%
Totals:	559	522	518	517	529	579	625	677	691	693	692	694	696	700
Capacity:	570	570	570	570	570	570	570	570	570	570	570	570	570	570
Open Seats:	11	48	52	53	41	-9	-55	-107	-121	-123	-122	-124	-126	-130

Fogelsville	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		15.1%	8.5%	2.4%	5.5%	-0.5%	7.5%	13.9%	4.3%	3.5%	2.6%	1.8%	6%	2%
Totals:	437	503	546	559	590	587	631	719	750	776	796	810	859	876
Capacity:	606	606	606	606	606	606	606	606	606	606	606	606	606	606
Open Seats:	169	103	60	47	16	19	-25	-113	-144	-170	-190	-204	-253	-270

Ironton	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-1.7%	-5.9%	0.5%	-0.5%	3.1%	6.3%	-0.5%	4.5%	-1.4%	0.2%	-0.2%	0%	0%
Totals:	414	407	383	385	383	395	420	418	437	431	432	431	431	431
Capacity:	517	517	517	517	517	517	517	517	517	517	517	517	517	517
Open Seats:	103	110	134	132	134	122	97	99	80	86	85	86	86	86

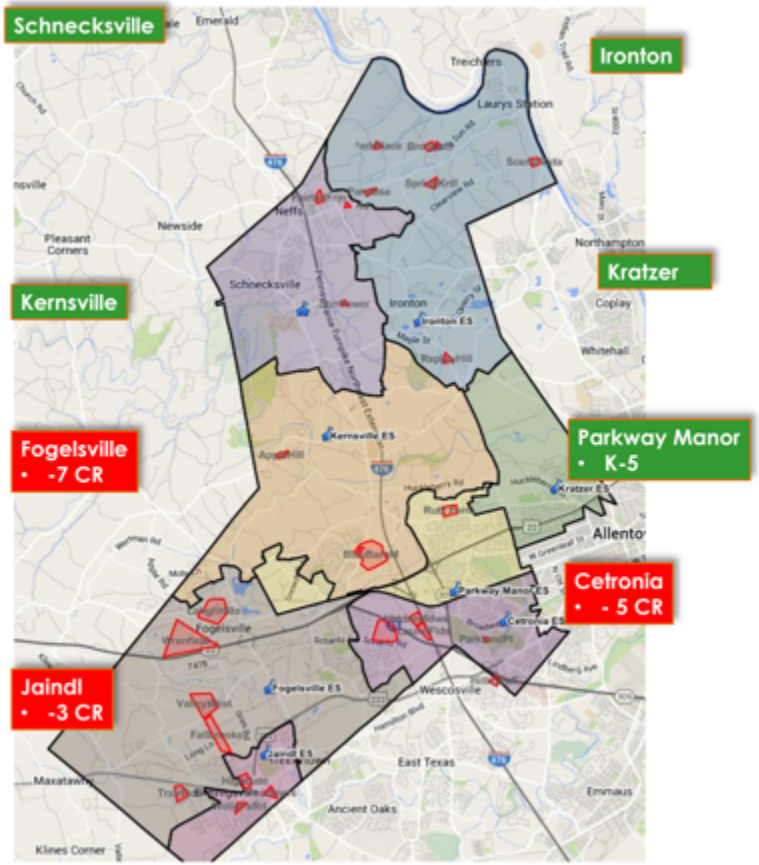
Jaindl	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-8.8%	3.3%	2.2%	3.4%	4.8%	3.7%	7.2%	1.4%	1.8%	0.6%	1.1%	0.1%	0%
Totals:	669	610	630	644	666	698	724	776	787	801	806	815	816	816
Capacity:	736	736	736	736	736	736	736	736	736	736	736	736	736	736
Open Seats:	67	126	106	92	70	38	12	-40	-51	-65	-70	-79	-80	-80

Kernsville	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-1.7%	-9.4%	5.5%	-2%	2.5%	2.2%	1.8%	4.1%	-0.6%	1.9%	-0.2%	0%	0%
Totals:	474	466	422	445	436	447	457	465	484	481	490	489	489	489
Capacity:	715	715	715	715	715	715	715	715	715	715	715	715	715	715
Open Seats:	241	249	293	270	279	268	258	250	231	234	225	226	226	226

Kratzer	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-2.1%	6.4%	-1.3%	2.8%	5.7%	1.9%	4.1%	-2.6%	1.6%	-0.4%	-0.2%	0%	0%
Totals:	383	375	399	394	405	428	436	454	442	449	447	446	446	446
Capacity:	490	490	490	490	490	490	490	490	490	490	490	490	490	490
Open Seats:	107	115	91	96	85	62	54	36	48	41	43	44	44	44

P. Manor	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-3.5%	-6.9%	-4.4%	-2.1%	0.2%	-5.6%	-3.5%	-1.8%	-2.6%	-0.8%	-0.5%	0%	0%
SDC:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:	508	490	456	436	427	428	404	390	383	373	370	368	368	368
Capacity:	523	523	523	523	523	523	523	523	523	523	523	523	523	523
Open Seats:	15	33	67	87	96	95	119	133	140	150	153	155	155	155

Schnecksville	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pct Chg:		-3.3%	-2.2%	-4.9%	-6.2%	-5.5%	-5%	-5.5%	-6.2%	2.1%	0.7%	-0.7%	0%	0%
Totals:	430	416	407	387	363	343	326	308	289	295	297	295	295	295
Capacity:	523	523	523	523	523	523	523	523	523	523	523	523	523	523
Open Seats:	93	107	116	136	160	180	197	215	234	228	226	228	228	228



LearningSCAPES 2019

Assessment Example (Quantitative)

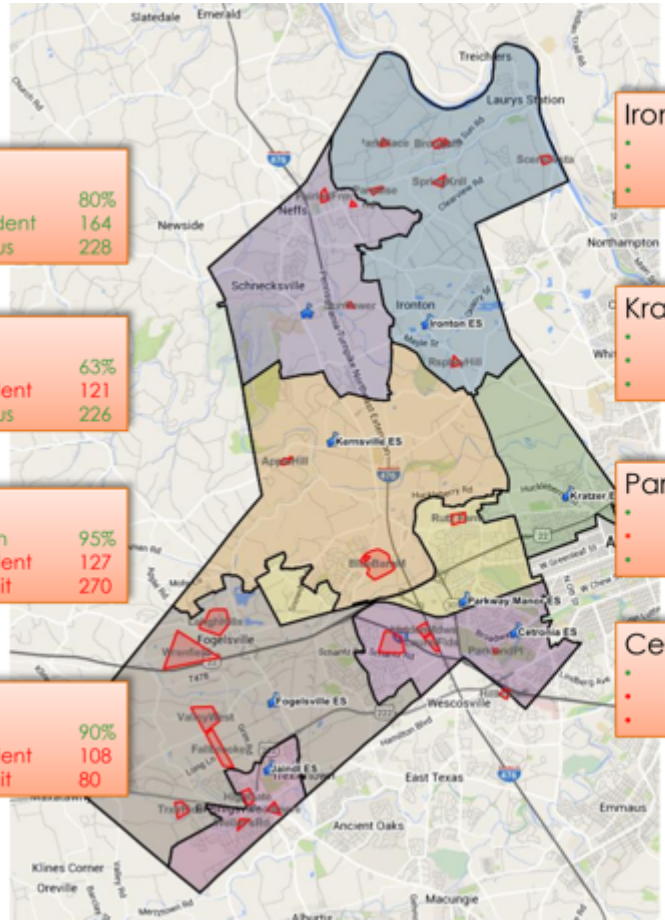
Elementary Schools

Targets:

- Utilization = 95%
- Area/student = 151 sq. ft.

Analysis:

- Utilization is in the acceptable to high range. This indicates that there is a surplus of classrooms for your current enrollment.
- Most schools have lower than the ideal target area per student. This indicates that there is a lack of support spaces such as collaboration zones, music etc.
- Northern schools have a projected surplus of seats while the southern schools have a projected deficit of seats. This indicates the need for additional capacity to house the projected enrollment.



Schnecksville
- Low utilization 80%
- High area / student 164
- Projected surplus 228

Kernsville
- Low utilization 63%
- Low area / student 121
- Projected surplus 226

Fogelsville
- Target utilization 95%
- Low area / student 127
- Projected deficit 270

Jaindl
- Low utilization 90%
- Low area / student 108
- Projected deficit 80

Ironton
- Low utilization 75%
- High area / student 190
- Projected surplus 86

Kratzer
- Low utilization 81%
- High area / student 159
- Projected surplus 44

Parkway Manor
- Low Utilization 83%
- Low area / student 148
- Projected surplus 155

Cetronia
- Near target utilization 94%
- Low area / student 118
- Projected deficit 130

Assessment Example (Qualitative)

Kernsville Elementary School

Fast Facts

- Constructed — 1974
- Past Renovations — 2004
- Acreage — 19.84 acres
- Gross Square Feet — 85,582 gsf
- Capacity — 709
- Current Enrollment — 447
- Utilization — 63%
- Area per Student — 121 sf
- Projected 2020 Enrollment — 481

Key Building Conditions

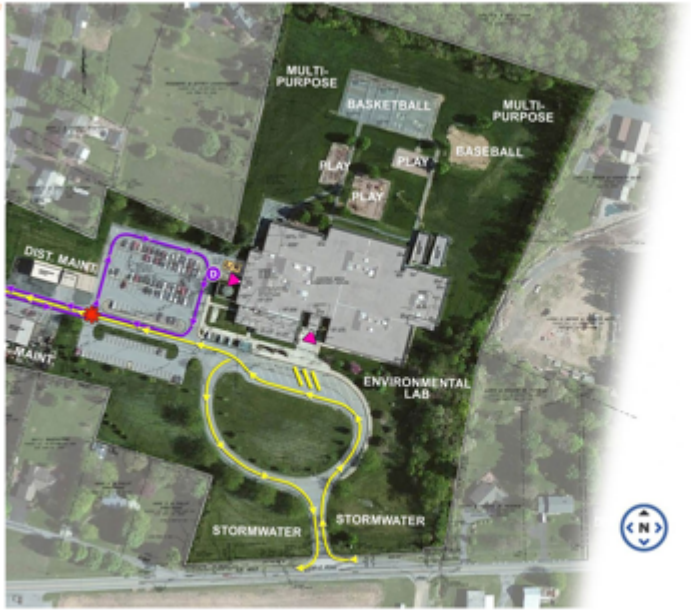
- FAIR — Architectural
- FAIR — HVAC
- GOOD — Electrical
- Poor — Plumbing/Fire Protection
- FAIR — Code Compliance

FAIR
Overall Building Rating

Key Site Conditions

- GOOD — Access, Circulation, and Parking
- GOOD — Athletics and Play
- GOOD — Amenities and Support Facilities
- GOOD — Safety, Security, and Code Compliance

GOOD
Overall Site Rating



Site Plan
Parkland School District

Assessment Example (Qualitative)

Site

Kernsville Elementary School is located in North Whitehall Township. Primary site access is provided by the arterial Kernsville Road, with secondary access from the local Shankweiler Road. The surrounding area is generally farm fields, low density residential, sparse commercial uses, and undeveloped property. The site gently slopes up from Kernsville Road to a steep wooded hillside in the back of the property. Several district maintenance buildings and storage areas are located on the western portion of the site. With the exception of an unsightly business to the immediate east, the property feels peaceful and secluded.

1. Vehicular and Pedestrian Circulation
   - Site access and traffic flow: Buses arrive from Kernsville or Shankweiler Road, but depart via Shankweiler Road for easier access to the larger road system. The District's Maintenance Facility is located near Shankweiler Road, and school representatives have suggested widening the access road from Shankweiler for better circulation.
   - Bus drop-off: There is a dedicated bus loop with parking at the main school entrance. With five to six total busses, 3 load and unload at a time. Staff greet the students, and then, depending on grade level, students access one of two school entrances.
   - Car drop-off: Cars form a one-way queue around the parking lot and drop-off students at a school entrance near the loading dock and trash area. This entrance is unappealing, but has the potential for improvement with screening and or an entry canopy. For student pick up, caregivers park and come to the door to meet the children.
   - Parking: Parking is generally adequate, but there are too few visitor spaces. Overflow parking at paved playground area.
   - Sidewalks: A combination of concrete and asphalt sidewalks and paths provide continuity of access throughout the site.
   - Loading & service: The loading and trash area has pavement issues. Additionally, ruts in adjacent landscape area indicate that the pavement is too small for the service vehicles.
   - Pavement & curb condition: In 2014, the site was repaved, and in general the vehicular pavement, curbs, and district maintenance facilities are well-maintained and in very good to excellent condition. At the bus loop, there are ruts and erosion adjacent to the pavement indicating inadequate pavement width and/or drainage.
   - Signage: Visibility of the school sign is excellent, and traffic control signs are adequate throughout the property.
2. Athletics and Play
   - Fields: There is one baseball field

Parkland School District

Technology

HVAC

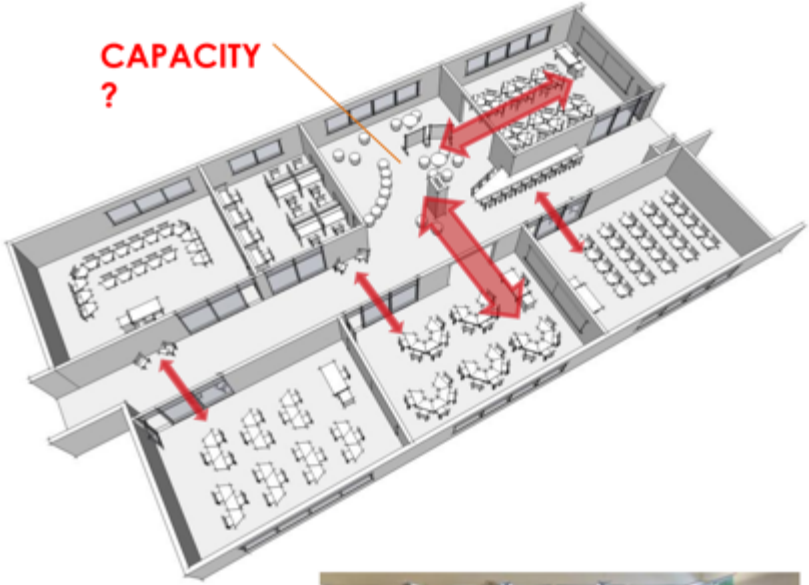
1. Summary
   - The purpose of this feasibility study is to evaluate the HVAC systems at Kratzer Elementary School, note current conditions and deficiencies and provide solutions or recommended improvements to the HVAC systems. The building is currently under construction during our site assessment.
2. Existing HVAC System Description
   - The building is under construction and a variable refrigerant heat pump fan coil system is being installed to provide heating and cooling throughout the building.
3. Central Heating Plant
   - The building is served by a variable refrigerant flow heat pump system and has no central heating and cooling plant.
4. Air Distribution Systems
   - Classrooms: The rooms are heated, cooled, and ventilated by ceiling mounted vrf fan coils. The A series of fan coil units has a condensing unit located on the roof. The fan coils and condensing units are new.
   - Corridors: VRF fan coils provide heat and cooling, these units are new.
   - Toilet Rooms: VRF fan coils provide heat and cooling, these units are new.
   - Cafeteria: Rooftop central station air handling units(2) with electric heating coil and DX cooling coil, these units are new.
   - Gymnasium: Horizontal heating and cooling air handling units with electric heating coils located on mezzanine above the equipment storage room, these units are new. The ductwork air distribution system is new.
   - Administration: Ceiling mounted VRF fan coil units and DX cooling coil, matching condensing unit on the roof. These units are new.
5. Building Temperature Controls
   - A new control panel with BACNET capability has been provided to tie into the central district DDC system.

Electrical

1. Electrical Service and Distribution Equipment:
   - Electrical Service: Square D 2000 ampere, 277/480 volt, 3 phase, 4 wire circuit breaker switch switchboard.
   - Distribution Equipment: Dry type 480V to 120/208 volt, 3 phase, 4 wire transformers and Square D circuit breaker panels for receptacle and general power branch circuits.
   - Switchboard, panels and electrical distribution feeders and branch circuits

Parkland School District

Assessment Example (Qualitative)



Ethics/Professionalism

- Provides leadership and stewardship for the responsible investment of public and private funding into school facilities – while being a known advocate for the importance of the learning environment on a child's future.
- Leads and has a record of leading transparent processes that help communities find common ground in developing solutions to complex and sensitive issues.
- Advocates for long term solutions that address the needs of all children and stakeholders, including underserved groups.

Ethics/Professionalism

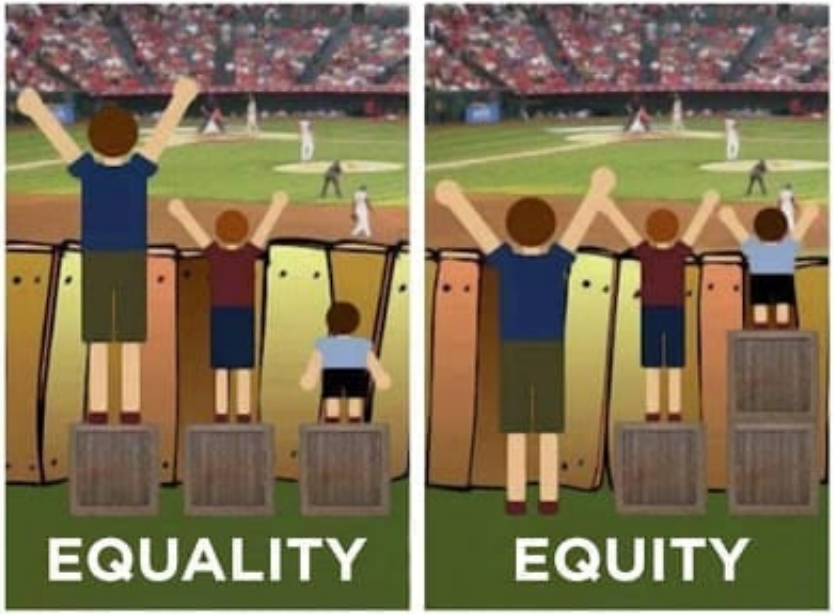
- Examples of how these topics are reflected in your work everyday:
  - Advocacy
  - Credibility
  - Transparency
  - Accountability
  - Stewardship

Ethics/Professionalism

- **Understands the diversity of the community and ensures that opportunities and resources are distributed equitably to serve all members of the community, including underserved groups.**
- Ability to address sensitive and difficult issues within a community and build stakeholder support and consensus by finding common ground.
- Ensures plan and program transparency and accountability.
- **Advocates and supports programs and investments that are appropriate and beneficial in the long term, not just meet immediate needs.**
- Provides stewardship and leadership for responsible investment of public and private funds.

Equitable Distribution of Resources and Opportunities

- Understanding diversity of the community
- Including underserved groups in the process
- Listening to all voices, not just the loudest voices
- Equality is not equity
- Different neighborhoods may have different priorities
- Accessibility for all learners



Stewardship for Responsible Investment

- Facility investments must provide benefit in the long term, not just meet immediate needs
- Designing for changing programs and needs
  - Small Schools
  - Career Tech Programs
  - Technology

Questions