



EDUCATIONAL FACILITY MASTER PLAN



BOWLING GREEN
CITY SCHOOLS
BOBCAT PROUD

SEPTEMBER 29th, 2023





A FRAMEWORK FOR EDUCATION ENABLED BY ARCHITECTURE AND DESIGN.

Supporting the whole child is critical for life-long learning to evolve. Engagement is also recognized as a high predictor of success both academically and professionally, and there is correlated evidence that the design of space impacts the ability for individuals to engage; from both the students' and educators' perspectives. Learning is experienced. A holistic and active learning approach drives change in the design of built educational environments. Designed decision making supports improved learning outcomes by intentionally incorporating empirical evidence.

IMAGES

Please note,
all Bowling Green student imagery
was provided by the district.

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**THIS EDUCATIONAL FACILITY
MASTER PLAN MEETS THE NEEDS OF ALL
BOWLING GREEN CITY SCHOOLS'
STUDENTS, NOW AND INTO THE FUTURE,
AND PROVIDES BEST PRACTICES
FOR TEACHING AND LEARNING
ACTIVITIES.**

Dr. Ted Haselman
Bowling Green City Schools Superintendent

Bowling Green City Schools

Dr. Ted M. Haselman
Superintendent

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Ms. Alexandra Reucher
Executive Director of Pupil Services

Dear Members of the Bowling Green School Community:

In June of 2023, the Bowling Green City Schools' Board of Education began the extensive process of creating an Educational Facility Master Plan. The District's goal was to create a solid, comprehensive, well-thought-out plan addressing all school facilities within the district. The Board of Education secured the help of DLR Group, a full-service architectural firm, to assist in this process.

Recognizing that a "perfect solution" for every single stakeholder would be impossible due to varying and quite diverse perspectives, the work began soliciting thoughts and opinions. Numerous members of the BGCS community and district staff spent many, many hours participating in activities, conversations, and planning sessions in an attempt to find the best possible solution to address the aging facilities of BGCS. The various perspectives helped guide DLR Group in facilitating the process from beginning to end to find a workable solution for our community.

Those involved in this long, tedious process feel this Educational Facility Master Plan is a plan that addresses the needs of the district's facilities for many years to come. The plan meets the needs of all students, now and into the future, and provides best practices for teaching and learning activities. Additionally, by utilizing eco-friendly mechanical systems such as geothermal heating and cooling, the new facilities can assist the district financially with lower operational expenditures and positively impact the world in which we live.

On behalf of the Bowling Green City Schools' Board of Education, our students, and our community, I would like to thank everyone who was involved in the process of creating this Educational Facility Master Plan. It is my belief this plan can redefine the future of education in Bowling Green City Schools.

Sincerely,



Dr. Ted Haselman
Superintendent

Mr. Daniel Black
High School Principal

Mr. Eric Radabaugh
Middle School Principal

Mrs. Alyssa Karaffa
Conneaut Elementary Principal

Mr. Zebulun Kellough
Crim Elementary Principal

Mr. Michel Bechstein
Kenwood Elementary Principal

MISSION STATEMENT: BGCS is committed to high academic expectations and extracurricular opportunities in an inclusive, caring, safe, and healthy environment. We empower and support teachers to be responsive to each student through a challenging and engaging curriculum. We partner with families and community to ensure student success.

DISTRICT OVERVIEW

Bowling Green City Schools is in northwest Ohio, located thirty miles southwest of Toledo and part of the metropolitan area. The school district serves students who live in Bowling Green, Custar, Milton Center, Portage, Rudolph, and Sugar Ridge all located within Wood County. It is the second largest school district in Wood County, after Perrysburg Exempted Village School District.

The district has five school buildings and approximately 2,800 students. Schools include Bowling Green High School, Bowling Green Middle School, Conneaut Elementary, Crim Elementary, and Kenwood Elementary Schools.

MISSION STATEMENT

Bowling Green City Schools is committed to high academic expectations and extracurricular opportunities in an inclusive, caring, safe, and healthy environment. We empower and support our staff to be responsive to each student through a challenging and engaging curriculum. We partner with families and community to ensure student success.

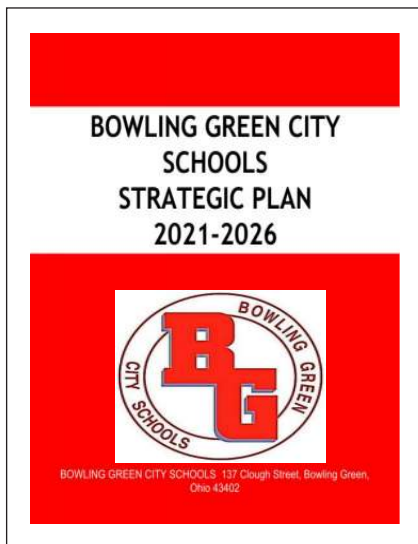
CORE VALUES

- Accountability
- Compassion
- Courage
- Creativity
- Honesty
- Integrity
- Respect
- Responsibility
- Service



**“PROVIDE EXCELLENT
INSTRUCTION AND
EQUITABLE OPPORTUNITIES
FOR EACH STUDENT.”**





BGCS' Strategic Plan is revisited and updated each year to reflect any changes based on completion or needs due to external factors.

A plan built through community, staff, student, and administrator engagement.



Bowling Green City Schools' Strategic Plan (2021-2026) outlines the district's commitment to *high achievement and providing educational opportunities that will help prepare BGCS' students for college and career readiness.*

The content of this Educational Facility Master Plan supports the mission and vision identified in the strategic plan, detailed specifically in the following goals:

Goal 1: Academic Achievement

BGCS will prepare all students to be contributing members of their community by equipping them with the 21st Century skills of communication, collaboration, creativity, and critical thinking, resulting in college and/or career readiness.

Goal 2: School Finance

BGCS will be good stewards of public funds, maximizing current state and local funding levels to provide excellent educational opportunities for students.

Goal 3: Communication

BGCS will build and maintain relationships with all stakeholders by engaging in two-way, timely, and consistent communication.

Goal 4: Human Resources

BGCS will successfully recruit and retain staff by providing a supportive and positive work environment; creative teaching opportunities; quality professional development, and a competitive compensation package.

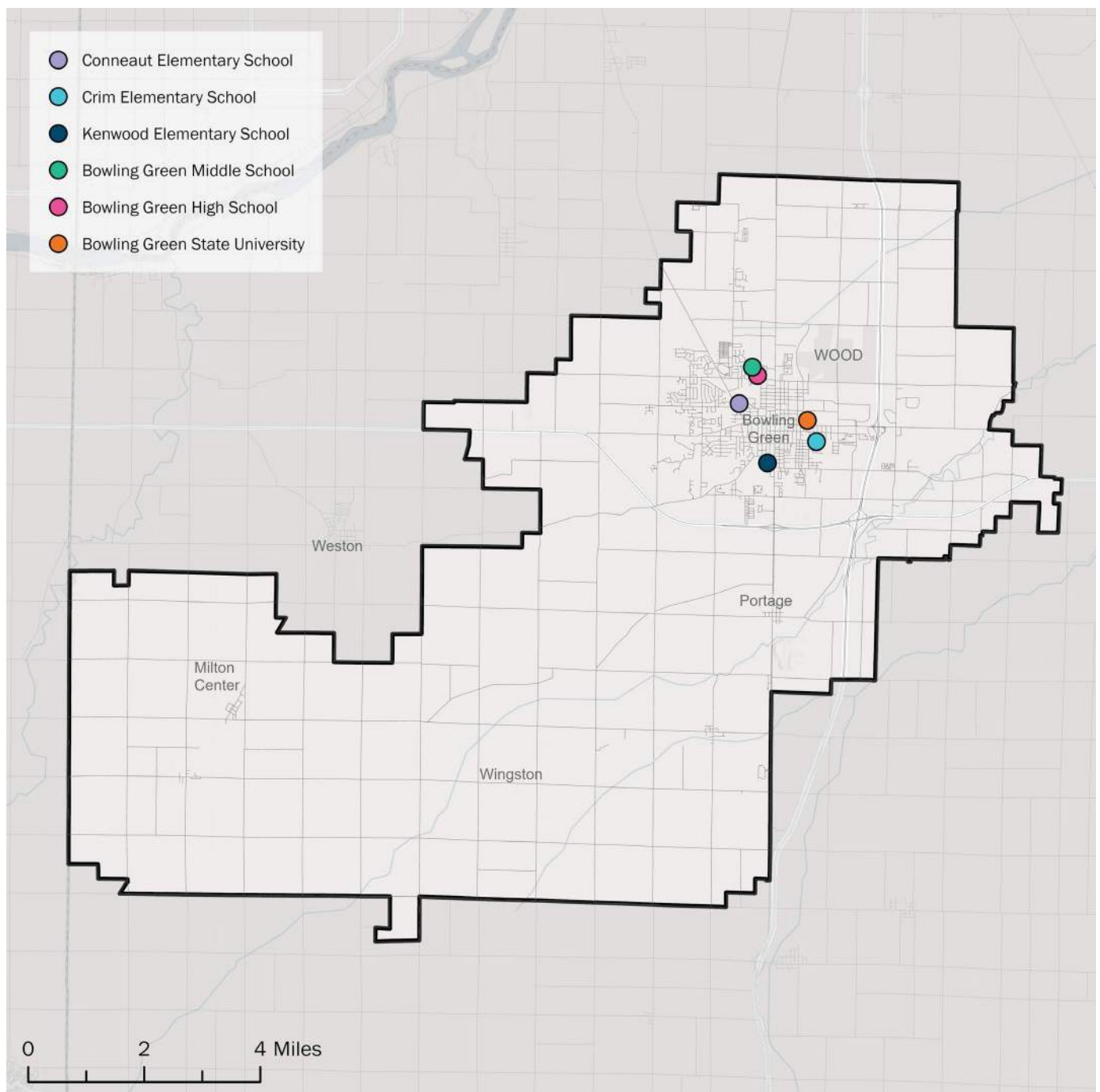
Goal 5: Operations

BGCS will provide optimal learning environments for students by building and/or maintaining safe, high-quality facilities and transportation services while demonstrating fiscal responsibility.

Goal 6: Technology

BGCS will build and maintain technology tools and infrastructure to optimize student learning, district operations, productivity, and communications.





ACKNOWLEDGMENTS



Recognition and gratitude for the significant effort across Bowling Green City Schools in support of this Educational Facility Master Plan.

Thank you to all contributing BGCS Leadership, Administration, teachers, students, and staff.

The Educational Facility Master Plan was developed in coordination with the BGCS Core Team below. All whom represented the voice of the greater school district and community.

Dr. Ted Haselman, Ed. D.....
Superintendent, Bowling Green City Schools

Francis Scruci.....
Former Superintendent, Bowling Green City Schools

Cathy Schuller.....
Treasurer, Bowling Green City Schools

Daniel Black.....
Principal, Bowling Green High School

Ryan Myers.....
School Board President, Bowling Green City Schools

Norm Greer.....
School Board Member, Bowling Green City Schools



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Educational Planner and Programmer



Kyle Waymeyer, CEM, LEED AP BD+C.....
Engineering Leader



A Bowling Green City Schools' theater production.

District Stakeholders

DLR Group extends our appreciation to Bowling Green City Schools' Board of Education for commissioning the Educational Facility Master Plan. We also thank district administrators, teachers, staff, community representatives, and all who assisted in the development of Bowling Green City Schools' Educational Facility Master Plan.

Ali Thompson	Erika Kimple	Lloyd Triggs
Allie Reucher	Hans Glandorff	Mason Roth
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Deb Mathias	Katie Bacon	Tracy Hovest
Devin Radcliff	Kayleigh Evans	Zeb Kellough
Emily Mennitt	Kisha Nichols	
Eric Radabaugh	Laura Buxton	

EDUCATIONAL FACILITY MASTER PLAN TIMELINE AND PROCESS



Bowling Green City Schools is dedicated to delivering the highest quality educational experience to every enrolled student. Recognizing the importance of maintaining and creating optimal teaching and learning environments, the BGCS Board of Education commissioned the development of an Educational Facility Master Plan to uphold this commitment.

The Educational Facility Master Plan is structured in five phases of design, strategically positioning Bowling Green City Schools for sustained success in the future. Building upon previous facility planning efforts, district leadership, teachers, staff, and community members participated in the planning process, exploring a vision of what lies ahead for students in their schools. Together, district and community stakeholders worked towards shaping the future for education in the region.

District Planning	SUMMER 2023	FALL 2023
Facilities Assessment by OFCC (2015 & 2023)	Educational Facility Master Plan	Final Planning Recommendations
Facilities Action Committee Visioning		



INVESTING IN SECONDARY EDUCATION

A comprehensive vision and plan for secondary education at Bowling Green High School must convey a sense of purpose, people, and place by informing decision-making, providing a sustainable framework for capital improvements, and elevating the human experience. The five-phase master plan approach provides opportunities for the incorporation of new insights which are reflective of changing dynamics impacting the continuum of education from both a local and national perspective.

EDUCATIONAL
FACILITY
MASTER PLAN
COMMUNITY
ORIENTED
AND STUDENT
FOCUSED

Throughout all five phases of the Educational Facility Master Plan, the design team met and collaborated regularly with district leadership. These phases informed the master plan’s project work plan and methodology:

DISCOVER

Develop process for engagement and project timeline/ schedule. Study current programs, curriculum, partnerships, and facilities. Tour existing facilities and interview school leadership across the district.

LAUNCH

Execution of strategic collaboration with district leadership, students, staff, and key stakeholders. Engagement organized in workshops and focus groups.

SYNTHESIZE

Study data to understand district-wide educational focus, priorities, goals, and needs as a way to develop a future facing academic vision. Development of preliminary high school program, concept plans, and cost estimates.

REPORT

Review, vet, and further refine the Educational Facility Master Plan recommendations to inform scenarios that represent all schools within the district; scenarios can be applied at various scales and phases.

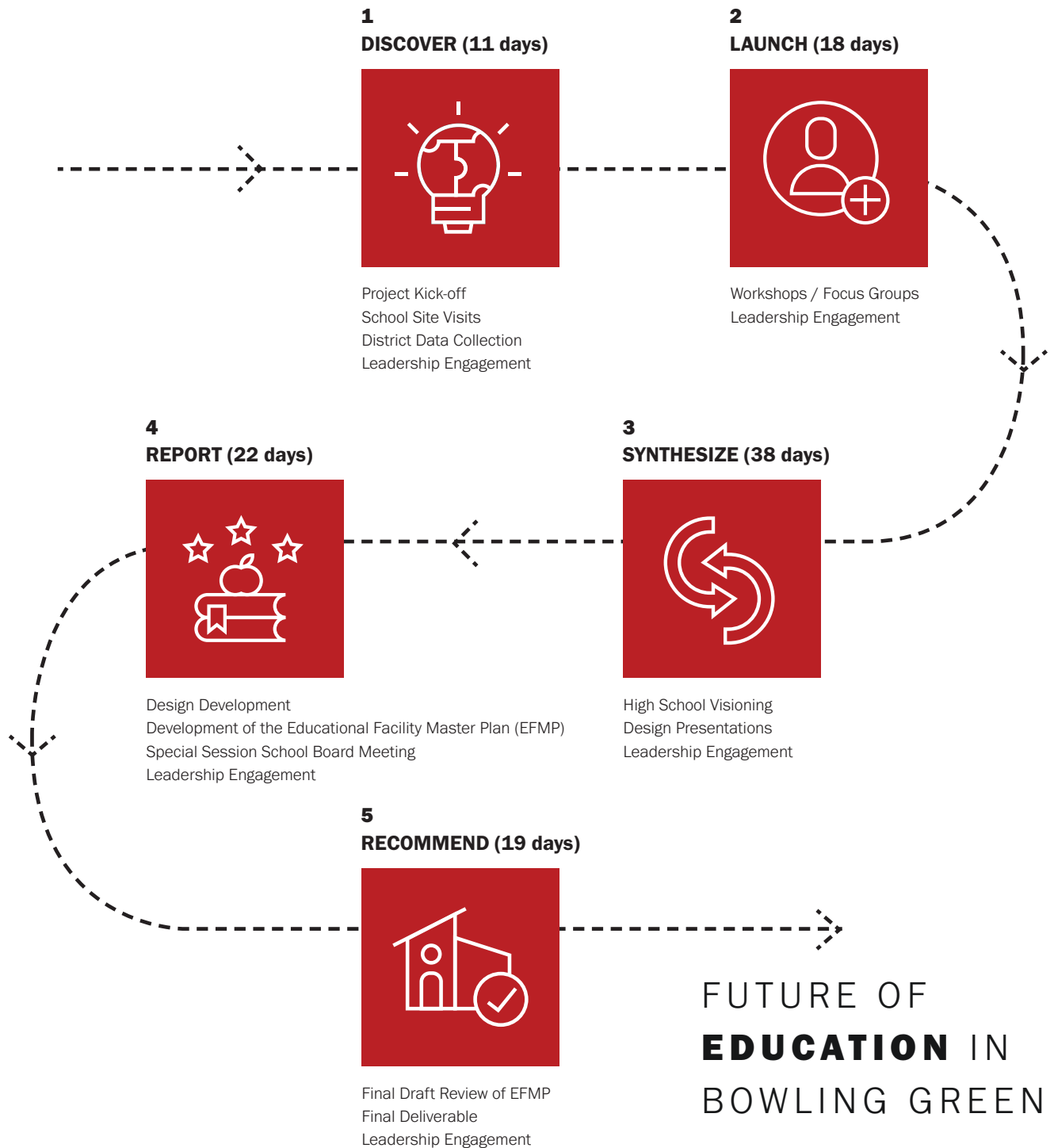
RECOMMEND

Adoption and implementation of Bowling Green City Schools' Educational Facility Master Plan.

PHASES OF DESIGN

EDUCATIONAL FACILITY MASTER PLAN PROCESS

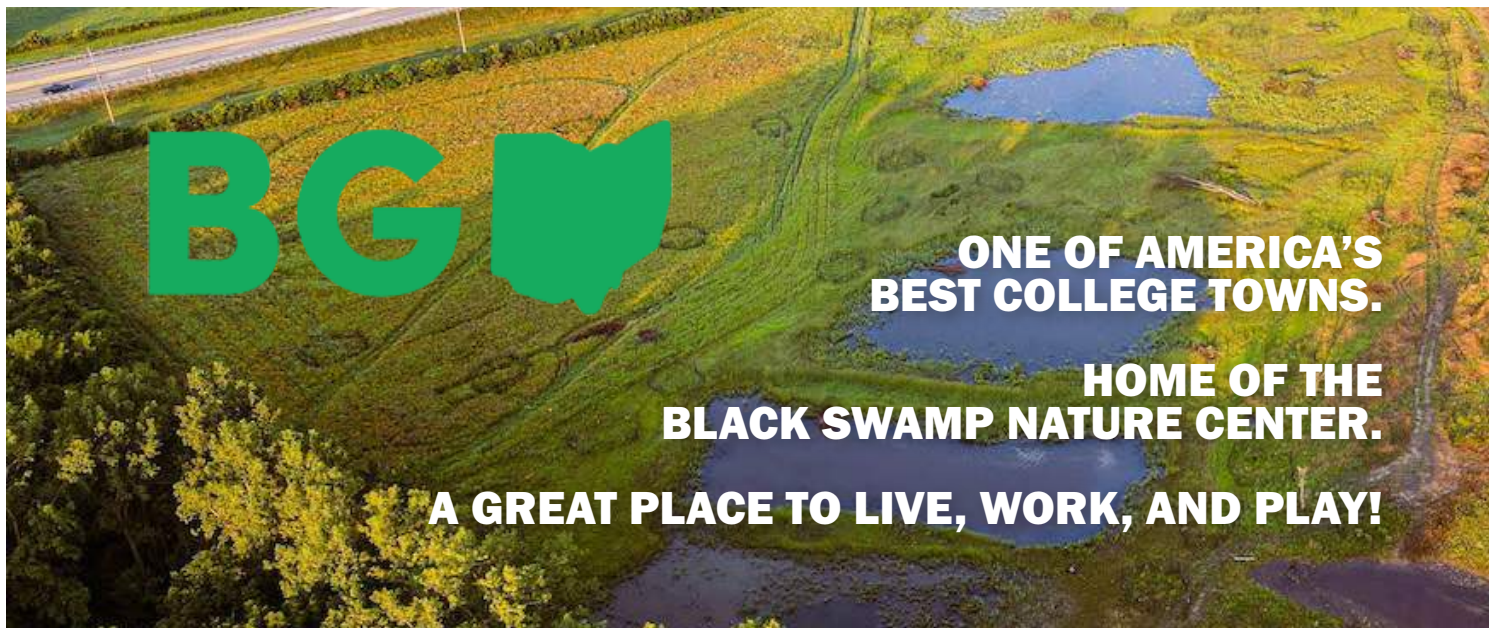
Four months of extensive study
and comprehensive engagement.



**THIS PLAN SATISFIES THE NEEDS OF
ALL STAKEHOLDERS AND ESTABLISHES
A VISION THAT OUR COMMUNITY WILL
BE PROUD TO SUPPORT
FOR YEARS TO COME.**

Dan Black
Bowling Green
High School Principal





BOWLING GREEN ESTABLISHING SENSE OF PLACE

Bowling Green is a community of over 30,000 residents with local charm and great personality. Home to major events and destinations like the National Tractor Pulling Championships, Black Swamp Nature Center, and Black Swamp Arts Festival, Bowling Green attracts visitors from all over the country. Bowling Green is a college town, greatly influenced by the presence of Bowling Green State University, with vibrant community culture and social life.

With an active, historic downtown, Bowling Green is ten miles end to end, with opportunity for outdoor play never far away. Bowling Green takes green space seriously and has nine city parks, supporting flora, fauna, sports, and recreation.^{1,2}

¹ <https://visitbgohio.org/about/>

² <https://visitbgohio.org/suggested-itineraries/>

BANNER IMAGE <https://beltmag.com/death-life-great-black-swamp/>





Redhorse Bend
Restoration project by H2Ohio
(David Ike Photography)

CELEBRATING THE BLACK SWAMP

Bowling Green was settled in 1832 near the center of the Great Black Swamp; a 1,500 square mile area stretching from lower Michigan through northwest Ohio and northeast Indiana.¹

One of the largest natural wetlands in Ohio was once in this area and now it is almost gone. It was a nearly impenetrable area of thick trees and murky water that sometimes was as deep as chest high. Now, more than a century after the Great Black Swamp was systematically dismantled, the State of Ohio is devoting millions of dollars to restore portions of the wetland habitat to address a multi-faceted water crisis.

In the Great Black Swamp region, the most valuable land during European settlement was along sand ridges. This was the land that was first settled by people entering the swampy region. Bowling Green was one of the highest points in the swamp, making the community the perfect place to start a farm and raise a family.

¹ <https://visitbgohio.org/about/>

² <https://www.bgsu.edu/about.html>

The city of Bowling Green features bike trails, parks, nature preserves, sledding hills and a weekly farmer's market, located just 30 miles from Toledo, Ohio and close to Cleveland and Columbus, Ohio, and Detroit, Michigan.²



BOWLING GREEN DRIVERS OF CHANGE

HIGHER EDUCATION IN BOWLING GREEN OPPORTUNITY FOR COLLABORATION



Bowling Green is home to Bowling Green State University, a public institution founded in 1910. BGSU is a high-research, nationally ranked, comprehensive university, awarding more than twenty million dollars in research grants annually. The university offers more than two hundred undergraduate, graduate, and Online programs and is situated on more than 1,300 acres with a student enrollment of over 19,600 students.¹

In 2021, BGSU outlined a strategic plan to elevate their commitment to strategic and foundational objectives, including Partnerships and Engagement and People and Community.

As it relates to this plan and the vision for secondary education in Bowling Green, BGSU offers a College Credit Plus (CCP) program supporting educational experiences outside of the classroom to enhance the lives of students with option to pursue college courses while in high school.

Bowling Green City Schools' 2021-2026 Strategic Plan identifies Academic Achievement as a high priority goal, with commitment to prepare all students to be contributing members of their community and college and/or career ready. With commitment to explore differentiated instruction and district programming, the plan says, *BGCS will offer pathways for acceleration through College Credit Plus, Advanced Placement, and Dual Enrollment courses at the secondary level.*²

The connection established by BGSU's CCP program offers a strong foundation by which to explore expanded collaboration now and in the future.

WHAT IF?

All BGSU undergraduates can participate in a Life Design program to maximize their academic experience, prioritize their well being, and make connections.

*Grounded in design thinking principles, students explore what they want to do and who they want to become.*³

Building upon the connection established with BGSU's CCP program, what if the Life Design program created opportunity for a mentorship component, connecting Life Design students with local high school students to motivate and inspire their thinking for the future?



¹ <https://www.bgsu.edu/about.html>

² <https://www.bgsu.edu/forward.html>

³ <https://www.bgsu.edu/life-design.html>

BUSINESS IN BOWLING GREEN GROWTH IN INDUSTRY

With its early development rooted in agriculture, Bowling Green continues to support the Food and Agribusiness industry. Much of Bowling Green's Economic Development is invested in Advanced Manufacturing, in addition to Aerospace and Aviation, Automotive, Energy and Chemicals, Logistics and Distribution, and Professional Services.¹

Bowling Green has undeveloped land that may be used for new development or for other purposes that would be beneficial to the residents of the area. Abbott, the global healthcare leader, announced in December 2022 its plan to build a \$536 million manufacturing facility in Bowling Green that will create 450 new jobs. The new state-of-the-art plant will manufacture specialty and metabolic powder nutritional products. The plant is expected to be fully operational by 2026.²

Why Ohio?

*Ohio has a long history of producing quality Abbott products to boost and sustain the health of Americans. Abbott currently has manufacturing facilities in Columbus and Tipp City.*²



HELPING TO IMPROVE LIVES THROUGH THE POWER OF NUTRITION

**“ABBOTT HAS LONG BEEN PART OF OHIO, AND
WE’RE PROUD TO BECOME PART OF THE LOCAL
COMMUNITY IN BOWLING GREEN.”**

Robert B. Ford
Abbott Chairman and CEO

¹ <https://www.bgohio.org/DocumentCenter/View/224/Bowling-Green-Industries-PDF?bidId=>

² <https://www.jobsohio.com/news-press/abbott-will-build-a-new-536-million-manufacturing-facility-in-bowling-green-creating-450-new-jobs>



Bowling Green offers connection – whether by road, train, or plane – Bowling Green provides access to world markets. Bowling Green is situated right along Interstate 75, the longest north-south interstate in America. In addition, it is minutes away from America’s longest east-west interstate (80/90). Bowling Green’s metropolitan area contains a population of 18 million within a 2-hour drive radius, with two-thirds of the North American market within a 1-day truck drive. In addition, Bowling Green offers an international airport (DTW) within an hour’s drive plus a state-of-the art intermodal freight facility in Wood County taking double-stacked container freight to world markets via east and west coast ports.¹

¹ <https://www.bgohio.org/201/Infrastructure>





BOWLING GREEN OFFERS CONNECTION



ESTABLISHING A VISION FOR TEACHING AND LEARNING

Why an Educational Facility Master Plan in Bowling Green City Schools now?

Bowling Green City Schools is a resilient school district as evidenced by their management of the COVID-19 pandemic and continued focus on a future-facing approach to teaching and learning. Transitioning into a post-pandemic era, the district has strategic opportunity to plan for the future.

Bowling Green City Schools has consistently navigated the limitations of its building inventory, particularly in the high school and all three elementary schools. Despite these challenges, Bowling Green City Schools continues to effectively prepare its students for their educational journey and life after high school. District facilities originating in the 1950s and 1960s present obstacles that impact flexibility and teachers' ability to deliver instruction in the learning environment in different ways. (In contrast, the middle school, constructed in 2009, provides a more conducive setting to support desired teaching and learning.)

The district's need for an Educational Facility Master Plan is driven, in part, by the need to establish more flexible environments that can better support teaching, learning, and educational programmatic changes in the future.

This inadequacy is particularly evident in learning spaces that are undersized, spaces that have been converted to uses other than the original purpose, and an overall lack of learning on display. Furthermore, essential space types are lacking or do not exist, including both large and small group spaces, areas for teacher collaboration, and creative maker spaces. The absence of these spaces inhibits the district's ability to provide comprehensive and future facing education.

The Educational Facility Master Plan addresses these opportunities and makes recommendations to better align BGCS' built environment, student and teacher engagement, and desired teaching and learning.

TEACHING AND LEARNING FOCUSED

Bowling Green City Schools prepares students for the future with a commitment to nurturing respectful and responsible citizens that are engaged in their own learning and empowered to follow their passions. Research shows that the built environment can impact a student's engagement in as much as 16%, to the positive or negative. Learning environments are tools that can support or hinder student deep learning and growth. Bowling Green City Schools' current facilities do not provide sufficient flexibility to support and accommodate educational approaches and strategies used for teaching and learning today. This Educational Facility Master Plan defines strategies through space and design, to elevate district resources and infrastructure for future-facing learning in Bowling Green.

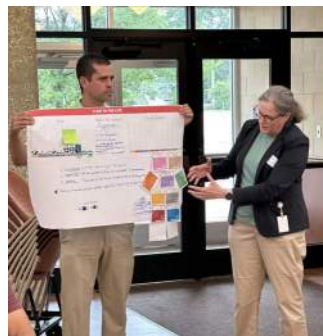
See the Appendix for an expanded summary of both the Teaching and Learning Visioning and VALUES workshops.

The planning process for Bowling Green City Schools was comprehensive and supported internal and external stakeholder engagement through workshops and meetings. Critical to the engagement were Teaching and Learning Visioning and VALUES workshops, organized and conducted to facilitate an understanding of Bowling Green City Schools' vision, educational preferences, and priorities.

TEACHING AND LEARNING VISIONING

DLR Group's BOLD (Bridging Organization Learning and Design) team facilitated a Teaching and Learning Visioning workshop to explore learning activities in Bowling Green City Schools and identify desired behaviors of students and teachers now and in the future. Approaching teaching and learning through the BOLD framework supports district and campus leadership to successfully implement change while also empowering educators to fully leverage their facilities. Within the master planning process, Teaching and Learning Visioning ensures alignment with district and/or campus initiatives and priorities and guides design decisions to ensure that impactful spaces are developed in the most cost effective and efficient way.

Emerging research shows that innovative learning environments are consistently tied to higher levels of deep learning for students, and where teachers demonstrate improved mindsets with greater clarity of purpose. When investing in new tools such as physical space, furniture, and technology, it is imperative to define organizational expectations and procedures that will facilitate changes to teaching and learning approaches and strategies.



ESTABLISHING A VISION FOR TEACHING AND LEARNING

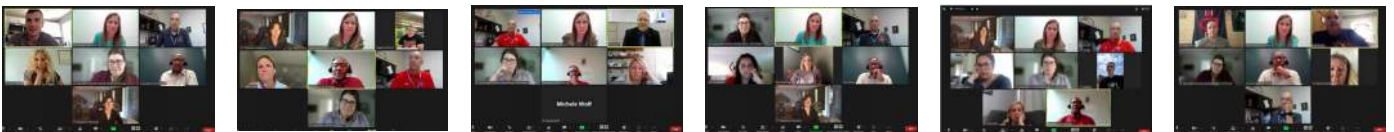
VISIONING FOR SUSTAINABILITY AND RESILIENCE

DLR Group experts in sustainability and environmental stewardship facilitated a VALUES (Viewing Architecture through the Lens of User Experience and Sustainability) workshop, focused on how sustainable design solutions impact the way users interact with and experience their surroundings.

The workshop is an important part of planning and project visioning and supports the development of BGCS' sustainability and wellness goals, within the Educational Facility Master Planning framework. Ultimately, the VALUES workshop identifies ways that Bowling Green City Schools can foster environmental stewardship in the recommendations of the master plan.

FOCUS GROUPS

In addition to the visioning workshops, Bowling Green City Schools' stakeholders engaged in focus groups to gather qualitative information about current programming and facilities at Bowling Green High School. Focus group meetings addressed academic and other topics to explore the teaching and learning strategies, approaches, methodologies, and philosophies followed by Bowling Green City Schools' high school instructional leaders. Participants articulated what is happening currently and shared their vision for the future of teaching and learning. The focus group conversations provided the design team with insight and a clear understanding of the types of spaces that will support desired teaching and learning at the high school and shape future-facing learning environments.



RECURRING THEMES

The workshops and focus group meetings fostered critical dialogue and creative thinking about the future of teaching and learning in Bowling Green City Schools. Recurring themes included:

Community and Cultural representation of all schools and learning spaces.

Spaces should be resilient to change supporting pedagogy now and in the future.

Learning Spaces should evoke happiness through currency, relevance, cleanliness, and beauty.

Schools should be accessible by students, teachers, and community members for resources.



"A space that is comfortable and safe allows for increased productivity and collaboration with students and staff. "

Amanda McBride,
BGCS School Counselor

PREPARING STUDENTS FOR THE FUTURE

The landscape of teaching and learning is changing with schools around the world embracing an on-going shift from a teacher-centered model to one driven by students. A traditional educational setting with rows of desks and an instructor lecturing limits the opportunities for high levels of student engagement and deep, relevant learning. Modern educational settings must provide opportunity for greater personalization, with adaptability and flexibility to meet the unique needs and preferences of students.

The role of the teacher is moving away from the one who imparts knowledge to one who facilitates learning. Learning environments that support the Six Cs (critical thinking, communication, creativity, collaboration, citizenship, and character education) are at the center of future-forward, flexible learning facilities.





Large group common areas or break out group spaces, co-teaching opportunities for shared work/collaboration, etc. are spaces we need. We need kids to learn how to think and build for the future.

”

General Academics Focus Group

PLANNING AND DESIGN STRATEGIES

SPATIAL POSSIBILITIES

Throughout discussions with stakeholders, there was consensus that school design and well planned learning environments impact learning. When done well, the impact is positive.

As stated earlier, research shows that the physical environment has a 16% impact on learning outcomes, either to the positive or to the negative¹.

Illustration 1 below shows basic classroom layouts on a continuum, from a traditional approach to an open-plan. In between the two extremes, there are hybrid layouts with wider corridors, collaboration space, and flexible walls. All six typologies represent various pedagogical methods that are common in today's schools.



Illustration 1: Dovey and Fisher's (2014) learning spaces types, as adapted in Imms, Cleveland, and Fisher (2016).

Correlating the six typologies, Illustration 2 shows the impact spatial layout has on student deep learning. Plans A and B are linked to low-impact teaching strategies while Plans E and D are linked to high-impact teaching.² When students and teachers are able to reconfigure their spaces, move around, and have choice, student and teacher engagement and success improves.

Future-facing learning environments adapt and change as customizable tools that can respond to different teaching approaches and individual learner preferences. Learning environments that are flexible and adaptable improve students' deep learning. When the built environment can adapt to support the learning experience, the building itself becomes a tool. Additional design principles grounded in naturalness, individualization, and stimulation can impact student health, wellness, and positive learning outcomes.

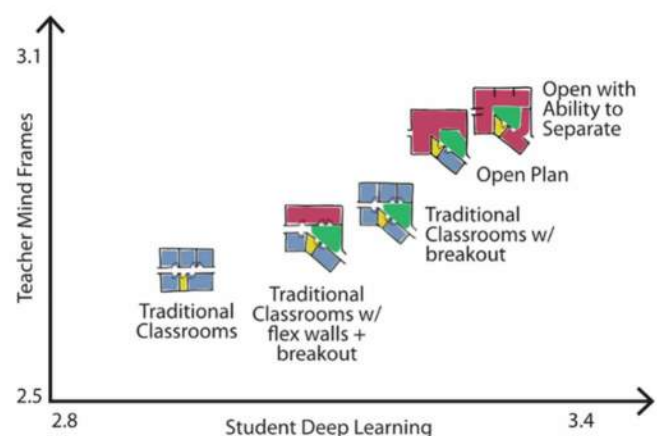


Illustration 2: Graph adapted from Imms, Mahat, Byers, & Murphy (2017)

PLANNING AND DESIGN STRATEGIES

ACADEMIC SPATIAL ALIGNMENT



Bowling Green City Schools is committed to creating future-facing learning environments that meet the needs of all students. At present, students, teachers, and staff are finding creative ways to break down the four-wall classroom barriers that exist in their current buildings. Moving forward, it is evident that there is desire for a fundamental shift away from a traditional classroom design where students are a passive audience, to a more active space for students to engage in and direct their own learning.

The incorporation of flexible spaces that support collaborative, interdisciplinary, and project driven learning can be scalable, support the creation of equitable experiences, and apply to new or existing facilities. Flexible spaces leverage strategic adjacency, furniture, and technology to empower the user and adapt to different activities.

Flexible learning spaces may be comprised of a variety of space types, equipped with flexible furniture and equipment to support multiple group sizes and differentiated learning activities. This diversification within the learning environment encourages learner-to-learner and learner-to-educator interactions that will result in strengthened connections and a positive impact on overall student health and well-being. Flexible learning spaces can also strengthen cross departmental and cohort collaboration to create elevated opportunities for impactful engagement.

SPACE

Innovative teaching and learning will be elevated with access to the following spaces: large and small group collaboration spaces, maker spaces, dining and social areas, and outdoor learning spaces.

FURNITURE AND TECHNOLOGY

Furniture selections will promote a welcoming, comfortable, safe, and learner centered environment. Technology should be fluid and ubiquitous. Equipment will be industry driven so as to stimulate (not replicate) real world experiences.

ADJACENCIES THAT CONNECT

Ample transparency between learning environments should allow for visible connections, passive supervision and learning on display. Physical connections will be further supported by strategic program/space adjacency.



SPACE

Capps Middle School
Warr Acres, OK



Missouri Innovation Campus
Lee's Summit, MO



Grand Star Elementary School
Gardner, KS



FURNITURE AND TECHNOLOGY

Turner Middle School
Kansas City, MO



Tahoma High School and
Regional Learning Center
Maple Valley, WA



Kearney Middle School
Kearney, MO



ADJACENCIES THAT CONNECT

Ottawa High School
Ottawa, KS



Roosevelt Elementary
Anaheim, CA



Bill Libbon Elementary School
Santa Maria, CA

PLANNING AND DESIGN STRATEGIES

Realized through the Educational Facility Master Plan visioning, Bowling Green City Schools is interested in the development of teaching and learning spaces that will empower learners to engage in and personalize their own development from kindergarten through twelfth grade.

Bowling Green City Schools has identified a desired curriculum and instructional approach that supports inquiry based and constructivist learning. As prioritized in visioning sessions, students should have authentic, real-world experiences and the process and artifacts of their learning should be on display and visible throughout the school environment.

DESIGN COMPONENTS FOR SPACE PLANNING

The integration of flexible environments requires building specific considerations relative to new or existing environments. This Educational Facility Master Plan recommends consideration of the following space types and furnishings, or design components, in all future planning, design, and construction initiatives. The incorporation of a few, or all, of these design components will elevate the creation of equitable and inclusive experiences for all Bowling Green City Schools' students.



**DESIGN
METHODOLOGY
EMPOWERING
STUDENTS
WITH CHOICE**

Design components for consideration:

- Mix of open and closed classroom spaces
- Walls that open between classrooms
- Walls that open to a large collaboration space
- Small and medium group sized spaces
- Large group/presentation areas
- Multi-purpose maker space
- Teacher planning workspace
- Large storage area
- Open Career and Technical education spaces
- Flexible Furnishings



BGCS students pull desks together in small groups to work collaboratively on an assignment.

Mix of Open and Closed Classroom Spaces

Designs include spaces that can adapt to different teaching and learning modalities easily and quickly. (Elementary configurations may provide large classroom spaces with flexible and varying furniture to easily adapt within one space, while middle and high school spaces have mixed options.)

Walls that Open Between Classrooms

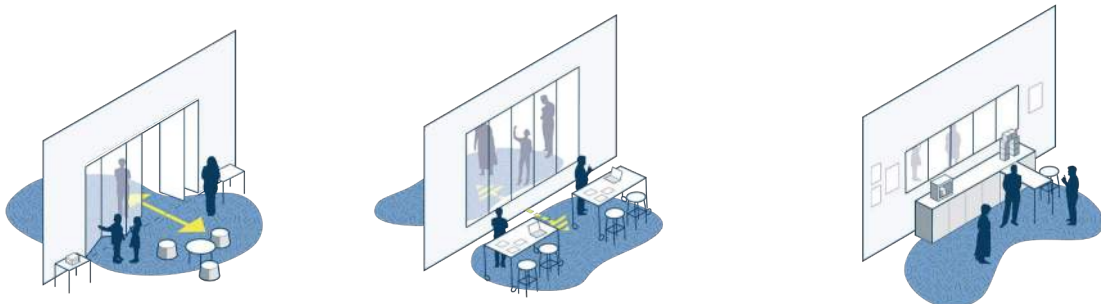
Designs provide options for flexible walls (that are easily movable) between learning spaces, with consideration of varying levels of transparency to support learning on display. The ability to open two classrooms into one provides opportunity for teachers and students to expand collaboration, diversify group work, and support cross departmental connection.

Walls that Open to a Large Collaboration Space

Designs accommodate walls that open to a larger collaboration space, learning commons, and/or outdoors. These may look like large garage doors and be transparent to connect visually and/or physically.

OPPORTUNITY TO CONNECT

How might learning on display change student and teacher engagement?



PLANNING AND DESIGN STRATEGIES



BGCS students utilizing a hallway for playful learning and creative collaboration.

Small and Medium Group Sized Spaces

Designs provide different sized spaces with proximity and visibility to support easy access and passive supervision. Settings should support individuals and groups of 3-6 and 7-12 individuals for collaboration, visible learning, and small group instruction. These spaces may be carved out of hallways and supported with writable surfaces and informal furnishings.

Large Group/Presentation Areas

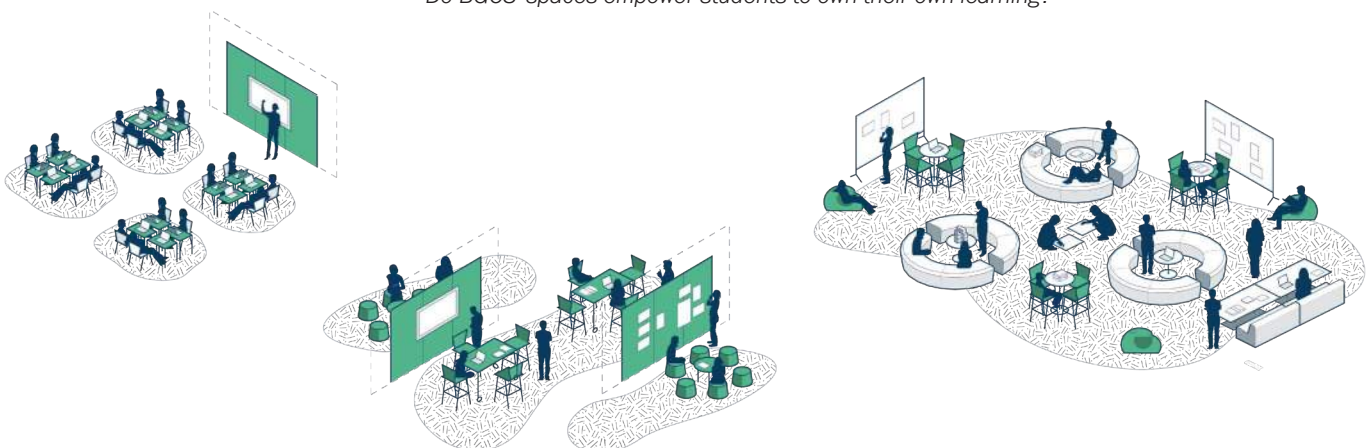
Designs include spaces configured with multiple flexible areas to host student, staff, and community presentations.

Flexible Furnishings

Designs support the physical needs and attributes of every user by promoting furnishings that are ergonomic, right-sized, and comfortable. A variety of seating options, table heights, and desk surfaces will give students and teachers the ability to choose what furniture works best for any given activity and the ability to change settings as they see fit.

VARIETY OF VENUE

Do BGCS' spaces empower students to own their own learning?





BGCS students working together in a small group to study a science and math problem.

Multi-Purpose Maker Space

Designs include a Multi-Purpose Maker Space to support a range of activities, including research, design, testing, and presentation. The space should be flexible and adaptable to suit multiple purposes and should be centrally located for easy access across departments. Maker spaces can be integrated into a media center or exist as dedicated, stand-alone space.

Open Career Technical Education Spaces

Designs aim to include flexible learning environments with accessibility by stakeholder groups to support educational delivery of career technical educational programs.

Outdoor Learning

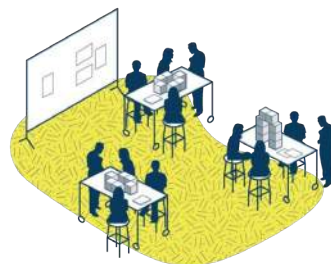
Designs provide a direct connection to outdoor learning when possible. Connections with nature improve physical and mental well-being, and support multi-sensory learning.

Teacher Planning Workspace

Designs provide teacher planning workspace to support teacher collaboration and planning—where teachers and staff will share information and resources, find respite, and own personal working space.

SPACE

What spaces are needed to support student and teacher success?



CLIMATE ACTION PLANNING

In accordance with stakeholder discussions and community engagement during visioning, the subsequent strategies for climate action planning detail how Bowling Green City Schools can cultivate environmental stewardship across the district. These strategies are integral to the facility recommendations of this Educational Facility Master Plan and the long-term vision for Bowling Green City Schools' facilities.

In review of this section, please note: When reviewing regional school data from the Commercial Building Energy Conservation Survey (CBECS), there is a significant difference in energy consumption between older buildings and newer buildings.

Building Envelope (Roof, Exterior Walls, and Windows)

The building envelope functions as a barrier to keep the elements out and the occupants safe, secure, and comfortable when combined with HVAC systems. A poor envelope can result in unsafe conditions (mold growth) even in a space that is served by an energy efficient HVAC system. The envelope also serves as the means for access to views to outdoors for the occupants and useful daylight.

A well-designed, constructed, and maintained building envelope is an essential element for safety, potential HVAC first cost savings, and ongoing operational cost and energy efficiency.

For existing buildings:

- Upgrades to insulation and vapor barrier in opaque assemblies
- Window replacement

For new buildings:

- Optimize orientation on site for passive heating benefit and access to daylight
- Design energy efficient building envelope
- Maximum window-to-wall ratio of 25-30%

Active energy conservation strategies reduce energy use by means of more efficient equipment and intelligently designed systems. These systems include efficient lighting systems, optimized daylighting design, integrated controls and monitoring, and heating and cooling systems that work at optimum efficiency year-round. Integrated performance design leverages passive systems and climate to support the active strategies.

Performance design combines architectural and engineering components to understand total building design performance. This encompasses envelope study, daylighting simulation, energy modeling, mechanical systems simulation, natural ventilation analysis, and thermal comfort studies to quantify performance.

HVAC Systems

Heating and cooling systems consume the majority of energy in most schools. They are also a considerable source of maintenance cost. While an HVAC system itself can save energy, replacing or upgrading an HVAC system in an existing building can be less than optimal if the building envelope is not considered first.

Retrofits of HVAC systems can also be limited by existing structural clearances and load limitations. Careful site investigation of the existing structure and envelope must be done prior to recommending HVAC system upgrades or changes.

- Replace existing boilers with new condensing boilers or explore viability of using heat pumps

In new builds, HVAC systems work with the other building systems (lighting, power, water, and envelope) to provide an energy efficient, safe, and healthy learning environment. For the Bowling Green climate, heating is the largest energy consumer in schools. Reducing the need for heating will likely result in significant energy savings.

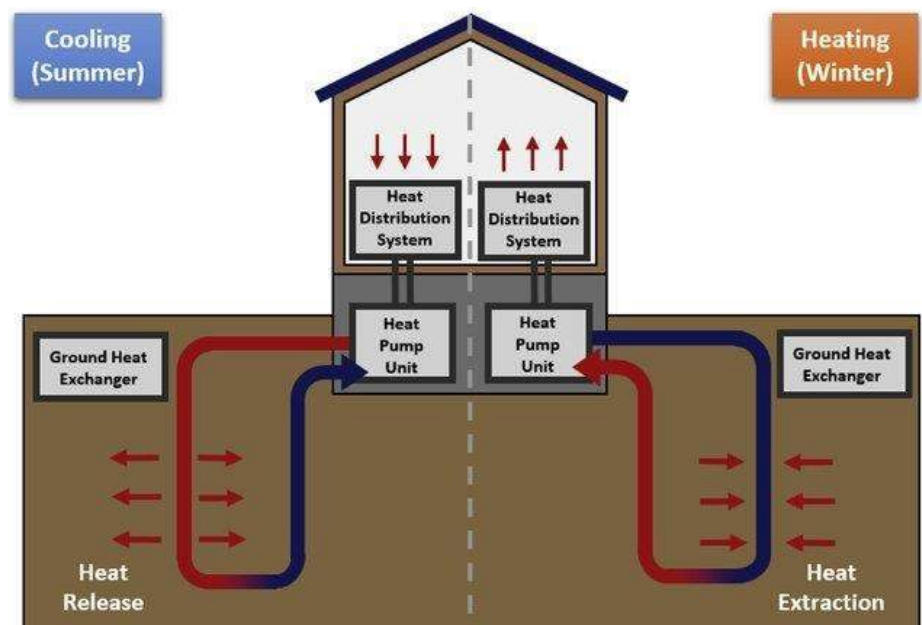
- Use ground source heat pumps for heating and cooling (GSHP)
- Where GSHP isn't feasible, explore other energy efficient technologies like water source heat pumps, air-cooled chillers, heat recovery chillers, and air source heat pumps
- Use dedicated outside air systems (DOAS) with energy recovery
- Use induced displacement ventilation systems for reduced outside air needs while delivering high IAQ

HEAT FROM THE EARTH

Renewable Energy for a More Sustainable Future

Illustration of ground source heat pump system in heating and cooling mode.

(Thesis Antonio Cazorla-Marin, ResearchGate.net)



CLIMATE ACTION PLANNING

Ground Source Heating and Cooling Site Analysis

Ground source systems are often a key component of low-energy buildings. These systems support electrification and the highest levels of heat pump efficiencies. With the benefits of the Inflation Reduction Act (IRA), ground source heating and cooling is a viable option under consideration for school facilities.

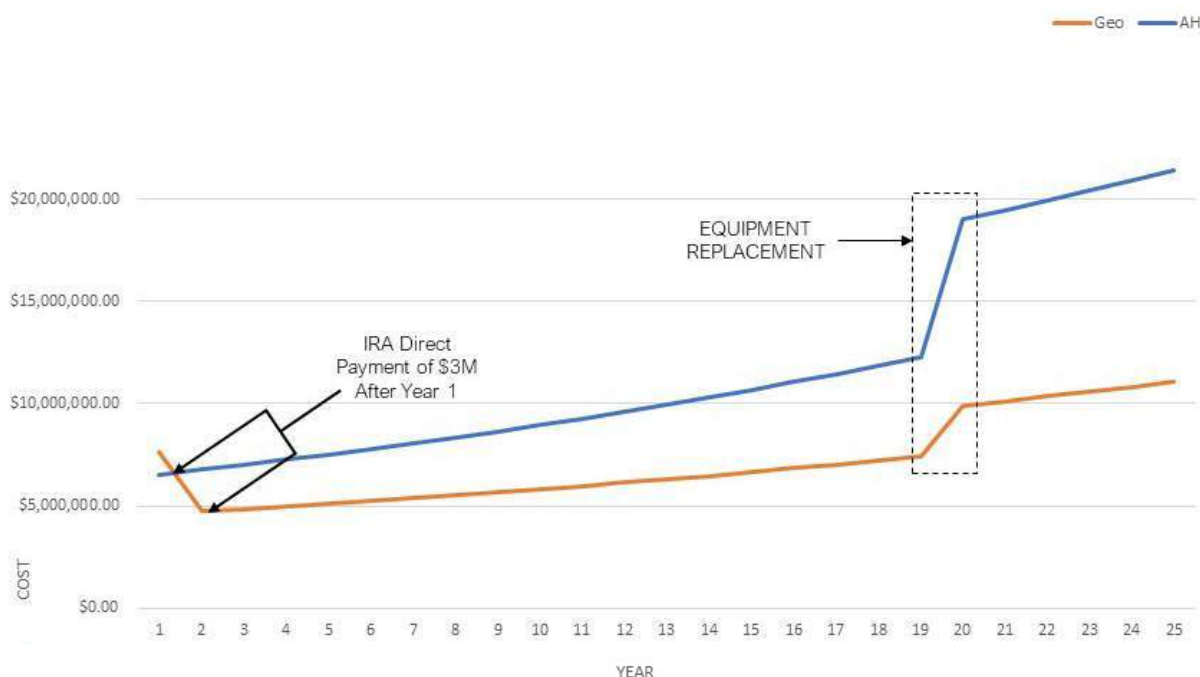
A geothermal system takes advantage of the earth's constant temperature (54 degrees F) just below the surface. Through a system of pipes installed between 300 and 600 feet deep, the ground is used as a sink in the summer to reject heat to and as a source of heat in the winter. A few benefits of a geothermal system are less equipment, easier commissioning, quicker start-up, easy to maintain, flexible renovations, and smoother shut downs. Looking into the future, the existing middle school has the potential to connect to a new geothermal system making the middle school and high school campus able to run off the same system.

In conjunction with other energy reduction strategies, a geothermal system can greatly reduce operating costs. The graphic below shows a life cycle cost analysis of a geothermal system over the course of 25 years. The initial up front cost is more than a typical AHU system, but after IRA credits are realized, the geothermal system costs less and continues to track less even after replacements are factored in. Savings over the lifetime of the building can be diverted to other funding needs.



LIFE CYCLE COST ANALYSIS

A geothermal system, over the course of 25 years, will save the district money.



Water Systems



Water costs in schools are typically high – especially in older buildings where inefficient fixtures are widely used. Upgrading fixtures to comply with the EPA WaterSense can reduce water consumption and associated costs significantly.

Upgrading a single toilet to WaterSense can save over 13,000 gallons per year – which equates to \$140 per year.

Low flow fixtures also save on the energy bill by reducing the amount of hot water consumed for things like handwashing and showering.

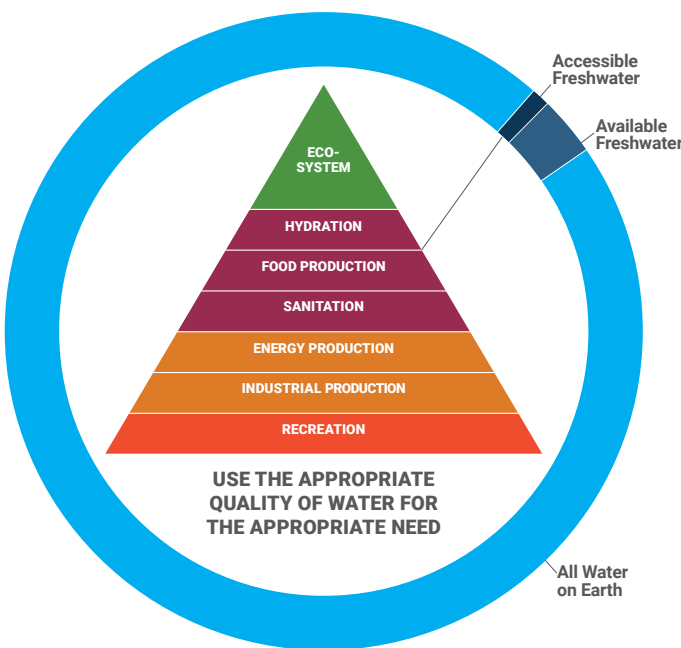
Lighting Systems

Lighting systems contribute to energy consumption in this climate in two ways:

1. The light fixtures and lamps consume energy
2. The light fixtures release heat to the space

Reducing lighting energy can save energy in two ways: less energy (watts) consumed for each unit of light (footcandle) uses less energy and less heat reduces the air conditioning bill. However, the air conditioning savings may be somewhat offset by an increase in heating energy – depending on the building and the weather.

Therefore, lighting retrofits are often among the most cost-effective ways to save on energy bills. A lighting retrofit should not only include fixture changes (from fluorescent to LED, for example), but also an upgrade in controls (installing occupancy sensors to automatically turn off lights when people are not present).



HIERARCHY OF WATER NEEDS:

Balancing Water Quantity and Water Quality

- Planetary Needs
- Industrial Needs
- Basic Needs
- Recreational Needs



Indoor Air Quality (IAQ)

People spend, on average, 90% of their time indoors. People breathe in over 1,500 liters per day of air. Children, who have a larger ratio of lung volume to overall body mass, are more susceptible to poor indoor air quality than adults. During the school day, kids and adults are indoors for the majority of the day. The majority of the school days are during the colder months when relative humidity is generally low. Several organizations, including ASHRAE, recommend maintaining an indoor relative humidity above 40% to help combat the spread of viruses including Sars-Cov-2. Effective humidity control also requires an effective vapor barrier in the building envelope.

Recommendations for healthy IAQ:

- Humidifiers for classrooms and administrative spaces for winter months
- MERV 13 filtration of all air handling equipment
- Minimum equivalent of 6 air changes per hour (ACH) in occupied spaces

Using technology like IAQ monitors and energy management systems (like Sonrai IAQ) can ensure buildings are operating in both a healthy and energy efficient manner.

Renewable Energy

The Bowling Green area is a suitable location for solar power. There are multiple ways to implement solar power. Existing open spaces can be leased to a solar power company to generate revenue for the District. Solar panels can also be installed on buildings. There are numerous ways to finance solar panels other than direct purchase by the District. A common way to achieve this is to work with a Purchase Power Agreement (PPA).

A PPA can be arranged where the solar panels are installed by a 3rd party at their cost and the District pays the 3rd party for the power at the same rate as the utility company. PPA's can be arranged where the maintenance of the solar panels is not the responsibility of the District as well.

Rule 3318:1-9-01

Standards for solar ready roofs and equipment in school buildings

Pursuant to Section 3318.112 of the Revised Code, the Ohio Facilities Construction Commission shall adopt rules prescribing standards for solar ready roofs on school buildings under its jurisdiction. "Solar ready" is defined as being capable of accommodating the eventual installation of roof top, solar photovoltaic energy equipment.

Inflation Reduction Act (IRA) Cost Savings

The IRA introduced direct pay for certain federal energy tax credits. This mechanism effectively enables tax-exempt entities, such as Bowling Green City Schools, to convert non-refundable income tax credits into direct payments. Direct pay will allow the district to access incentives for clean energy technologies that include solar, wind, combined heat and power, and others, despite not having any federal tax liability.

The following are eligible technologies under the IRA program that are viable options for Bowling Green City Schools to consider:

- ground source heat pumps
- solar photovoltaics
- solar thermal
- fiber optic solar
- geothermal energy
- dynamic glazing
- battery energy storage system (BESS)

Projects greater than 1MW of electrical or thermal energy need to comply with the Prevailing Wages and Apprenticeships Requirements in order to receive increased incentive amounts. The base credit is increased to 30% for projects that meet the prevailing wage and registered apprenticeship requirements. Projects can receive an additional 10% tax bonus of 100% of the project's steel or iron used if the material was produced in the United States, and 40% of the project's manufactured components if produced in the United States for projects put in service before 2025, 45% in 2025, 50% in 2026, and 55% after 2026.

DATA-DRIVEN DESIGN

The Educational Facility Master Plan synthesizes multiple strands of data that are both quantitative and qualitative to create a composite picture of Bowling Green City Schools' priorities. Supported at its core by the district's commitment to student success, the Educational Facility Master Plan is organized around future-ready learning, the infrastructure, or condition of existing facilities, and a vision for secondary education in the district.

The framework for the data-driven approach and comprehensive analysis leveraged four key data sets:

- requirements and guidelines per the Ohio Facilities Construction Commission,
- the physical condition of Bowling Green City Schools' facilities,
- the adequacy of those facilities to support the district's evolving academic vision,
- and district utilization patterns (enrollment and capacity).

These were studied to address both immediate needs and a vision for the future for at least a decade to come.

Data was collected and studied within a community context and with absolute focus on the relative impact on student success.

The approach to the recommendation process required review of multiple sources of data, including metrics gathered from Ohio Facilities Construction Commission, facility condition assessment reports, Bowling Green City Schools' enrollment projections, and school building information provided by the district. Facility information was first analyzed school by school and then district-wide to understand implications locally and from a broader community perspective.

Ohio Facilities Construction Commission (OFCC)

Prior to this Educational Facility Master Plan, Bowling Green City Schools committed to participate in the Ohio Facilities Construction Commission Expedited Local Partnership Program (ELPP). This partnership supported execution of facilities assessments and a demographic enrollment study; collateral that was studied and applied throughout the Educational Facility Master Plan process. The ELPP is designed to provide school districts, not yet participating in the Classroom Facilities Assistance Program, the opportunity to move ahead with their project.

The ELPP programs work as follows. School districts are required to pass a resolution requesting to enter the program. The Commission, in turn, assesses the district's facilities and enters into an agreement with the district on development of a facility master plan that addresses all school facility needs of the district. Initial school improvements are funded by the district and are reimbursed based on their apportionment. Here again, the district is required to submit an application and a resolution to enter the Classroom Facilities Assistant Program.

OFCC: Facility Condition Assessments

Through the Ohio Facilities Construction Commission, facility condition assessments were conducted for all five of Bowling Green City Schools' school buildings. An assessment was conducted for each school building to determine the level of improvements needed or if new construction would be warranted. All major systems were evaluated, with associated costs.

Abbreviated summaries of the report:

The high school received borderline ratings for most of the categories assessed which indicates that the cost to renovate would exceed two-thirds the cost to build new. Systems have been extended past their useful life, technology is dated per OFCC standards, and spaces are proving to be a hindrance in being able to support future ready learning.

The middle school received excellent ratings in most categories being that it is a newer building. All systems, building components, and finishes are still in good condition.

The elementary schools are in varying levels of need. There is not enough instructional space at some schools to adequately accommodate all students, as evidenced by portables being used for teaching. Also, much like the high school, systems and finishes are past their life span.

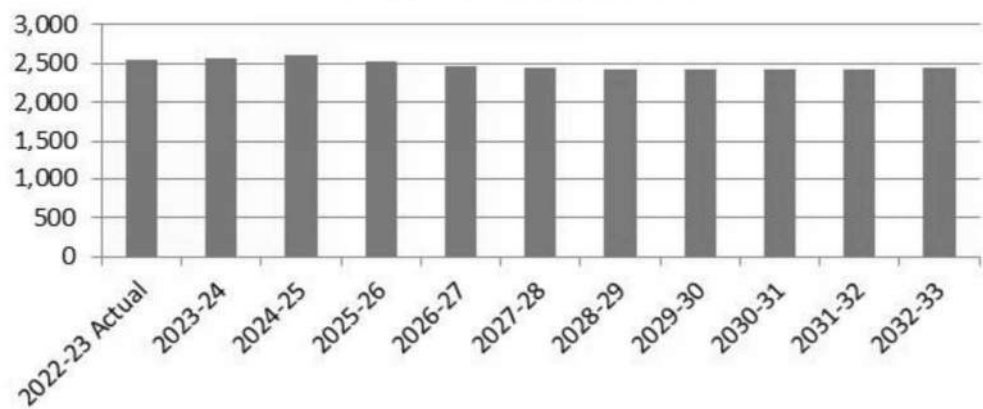
OFCC and Future Think: Projected Enrollment

Based on a request from the Ohio Facilities Construction Commission, Future Think was contracted to complete a demographic enrollment study, using the cohort survival method and based on a variety of factors: live birth data, historical enrollment, community school enrollment, open enrollment, community demographics, housing information among other factors.

Several trends were studied to understand and forecast total student enrollment. These included enrollment patterns over time and students' migration patterns (students living within district boundaries but attending elsewhere, and students living outside of district boundaries but attending a district school).

Based on 2022-23 to 2032-33 projected enrollment, there will be an estimated decline of 100 fewer students enrolled over this 10 year period.

Bowling Green City Schools' Projected Enrollment
Future Think DRAFT Report to OFCC | March 27, 2023



MASTER PLAN RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL: A LASTING LEGACY; BUILDING FOR THE FUTURE

Bowling Green High School has a strong history of supporting its students and preparing them to be college, career, and life ready. The district's affiliation and partnership with the PENTA Career Center and Bowling Green State University (BGSU) provides them with an unique opportunity to expand its sphere of influence and exposure for all BGCS students.

With an eye toward the future and desire to maximize opportunities for students, the district sees an opportunity to leverage the high school to cultivate even stronger bonds with local industry, BGSU, and the broader community.

STUDENT ENGAGEMENT THROUGH COMMUNITY OUTREACH

Community building is vital to active student engagement. Research shows that when students feel that they belong to their academic community, that they matter to one another, and that they can find emotional, social, and cognitive support for one another, they are able to engage in dialogue and reflection more actively and take ownership and responsibility of their own learning.¹

In conjunction with previous planning efforts, the high school emerged as a top priority, with need for updated facilities that can support and adapt to the evolving landscape of teaching and learning. Intentional and strategic engagement guided the conceptual design of a new high school for Bowling Green City Schools. The proposed design maintains adjacency to Bowling Green Middle School and proposes the re-purposing of the existing high school building as the BGCS Activity Center.

The activity center is poised to become a valuable asset for Bowling Green City Schools, functioning as a resource that offers students and community members space for a variety of programs and events that extend beyond the regular school curriculum. In response to students' expressed desire for increased integration and visibility within the broader community, this redesigned facility holds the potential to bridge any gap between students and the community.

¹ Columbia Center for Teaching and Learning: Resources and Technology (Baker, 2010; Berry, 2019; Brown, 2001; Bush et al. 2010; Cowan, 2012; Lohr & Haley, 2018; Sadara et al., 2009).

Each area within a high school has the potential to elevate the educational journey, empowering both students and educators to connect, ideate, and explore. The conceptual design for the new Bowling Green High School leverages the built environment to create intentional space for student engagement and deep learning.

The proposed design recommends that specific sections of the existing high school are demolished, such as the classroom wings and courtyard, while other areas, such as gymnasiums, locker rooms, dining spaces, and music facilities will be thoughtfully preserved. The BGCS Activity Center will remain under district ownership but be available to the public for extracurricular events and community activities.

The following spatial possibilities have been explored:

1. Converting the dining area into a strength-building weight area.
2. Maintaining the gymnasiums to accommodate district-wide and community events, complete with access to a functional kitchen.
3. Utilizing the music spaces to support local artists and music programs, with the potential consideration of transforming one of these spaces into a black box.

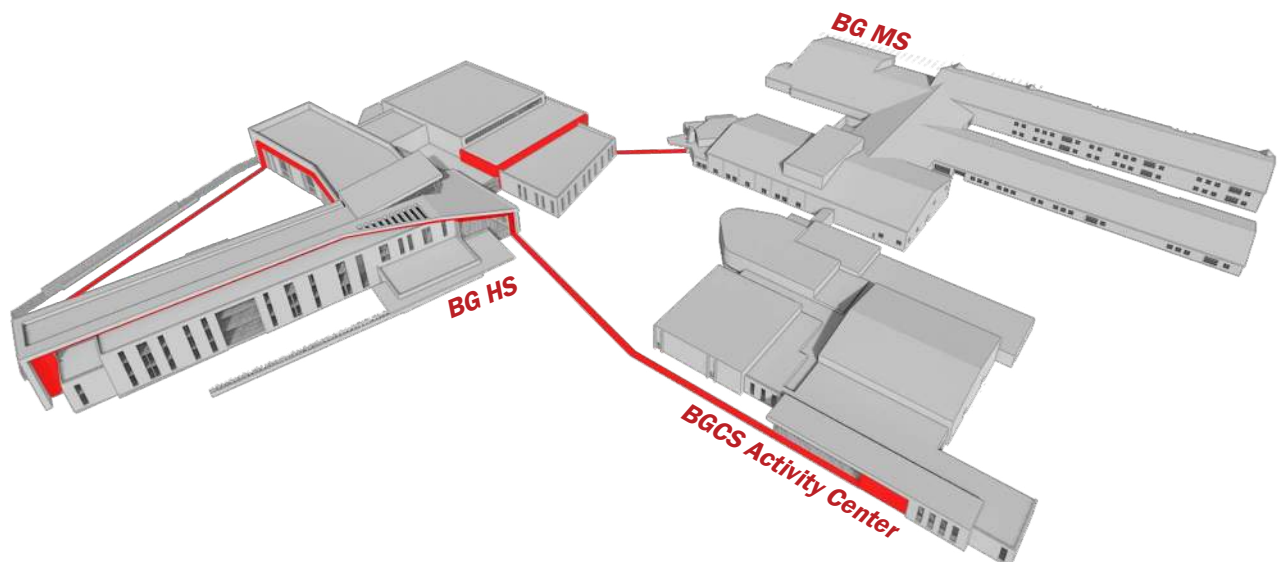
The following provides specific uses of space that would support the diversity of the district, community events and groups:

- Providing family services that educate, develop skills, and promote health and well being of district families
- Indoor pickle ball league
- Esports events
- Adult education partnerships
- BG Community Band practice and events
- Wood County Football Officials training
- Bowling Green City Schools' Food Pantry
- Bowling Green Bobcats Youth Sports Teams practice and events

*The subsequent section dives further into the design details of the proposed new Bowling Green High School.

PART I

Community focused and student centered is represented visually with the use of the BGCS Scarlet color. The new high school supports the individual learning pathways of students while also celebrating the connectivity on campus and to the greater community.



MASTER PLAN RECOMMENDATIONS

BOWLING GREEN MIDDLE SCHOOL: BUILDING UPON SUCCESS

Bowling Green Middle School is dedicated to empowering students to achieve both short-term and long-term goals during their transitional years. For every student, a thoughtful consideration of course selections relative to future learning goals, aids their journey toward high school. Additionally, the school encourages student autonomy by offering advanced courses.

Embracing flexibility and a cross-curricular approach, the middle school is organized into teams representing each core curriculum, and further enhanced by pod arrangements that facilitate idea exchange and resource sharing. The school is at the forefront of future facing learning within the district, but has acknowledged spatial limitations that challenge desired teaching and learning.

COLLABORATION SPACE FOR INDIVIDUAL ADVANCEMENT

Successful middle school programs are attuned to the varied needs of early adolescents. Acknowledging this unique developmental phase, it is imperative to afford students the opportunity to venture beyond the boundaries of “houses” or “clusters” and explore elective programs that resonate with their interests.

The inherent curiosity found among students in this age group is optimally channeled through collaborative learning experiences that unfold in real-world contexts. Environments designed to facilitate seamless teacher-student interaction and hands-on learning within classroom clusters act as catalysts for individual advancement. Ultimately, these spaces not only encourage the pursuit of personal interests but also foster skills that extend beyond conventional academic learning.



To align the built environment with the middle school's forward-facing pedagogical approach, this Educational Facility Master Plan recommends that the middle school explore the incorporation of the design components outlined in Planning and Design Strategies to infuse classrooms with more flexibility and create shared collaboration zones.

Additional considerations are outlined below.

TEACHING AND LEARNING DEFINES SPACE AND FURNITURE

Opportunities for the learner to create their own environment gives them ownership of their educational experience. Learners who have a variety of choice in their learning environments can increase their physical and psychological comfort. Flexibility of furniture will help support ongoing change and advancement in education.

ACCOMMODATE STUDENT CHOICE

1. Thoughtful consideration of furniture, fixtures, and equipment selection to offer students a broader range of choices.

INCREASE UTILIZATION

2. Consider expanded opportunities for use of the dining area to accommodate various class functions, projects, and/or events.

LEARNING ON DISPLAY

3. Explore the incorporation of flexible walls (operable partitions or overhead doors) to enhance adaptability for class autonomy and collaboration.

CONNECT TO BOWLING GREEN HIGH

4. Seek out opportunities to collaborate with the high school and share their space.

MASTER PLAN RECOMMENDATIONS

BOWLING GREEN CITY SCHOOLS' ELEMENTARY SCHOOLS: A FUTURE TO STILL BE DESIGNED

Bowling Green City Schools supports three elementary schools, each serving an important role in their respective neighborhoods. Conneaut, Crim, and Kenwood Elementary Schools support student success and the creation of equitable experiences through differentiated instruction and providing opportunities to discover their passions. These schools work every day to inspire their students to become lifelong learners and compassionate contributors to the world around them.

Conneaut, Crim, and Kenwood Elementary Schools were built in the 1950s and 1960s; seventy-five years later, they are not able to accommodate the district's vision for future-ready learning due to space limitations. The dedicated teachers and staff in these buildings are working diligently to retrofit existing infrastructure, making space for teachers and staff and creatively repurposing existing spaces, to better support students. The presence of portables on campus at Conneaut Elementary School has posed additional challenges to program accessibility and teacher collaboration. Beyond the outdated infrastructure, technology, and systems, the physical layout of the buildings does not accommodate desired teaching and learning.

Master plan engagement confirmed that the elementary schools should remain a critical priority for future consideration.

Much like Bowling Green Middle School, there are opportunities to apply planning and design strategies in the interim to enhance flexibility.

Strategic acquisition of versatile furniture can facilitate the creation of distinct collaborative zones within classrooms, fostering innovative interactions between students and teachers. Refreshing the media centers across all schools with flexible furnishings and collaborative spaces, ranging from personalized learning areas to large group project areas, will positively impact student and teacher engagement.




ELEMENTARY SCHOOLS LAY THE GROUNDWORK FOR LIFELONG LEARNING.

When the built environment is in alignment with desired teaching and learning (inclusive environments, flexible furniture, integrated technology, outdoor learning, etc.) the transformative effect of elementary education is elevated, setting the stage for students' future growth and accomplishments.

Acknowledging the need for more comprehensive efforts, the district recognizes that the visionary planning applied to the high school should extend to its elementary schools. To align the collective vision for all schools, Bowling Green City Schools' leadership and partnering design professionals should engage in focused discussions.

This Educational Facility Master Plan has considered different scenarios for Bowling Green City Schools' elementary schools that provide and elevate opportunities for expanded district resources, equality of resources to all students, and support of the families they serve; it should universally benefit all students and families within BGCS. The following scenarios present opportunity for the district in different ways and should be used as a foundation for future conversations.



“Bowling Green City Schools is dedicated to the planning of all district school facilities. Our work has only begun with conversations stemming from the Educational Facility Master Plan. As a community, WE MUST work together to build the future for our elementary students that will provide equitable opportunities and resources.”

Ted Haselman
Bowling Green City Schools
Superintendent

- To foster equitable experiences and ensure no student or educator is limited by outdated facilities, consider the replacement of all three school buildings at their current sites to keep neighborhood schools. Despite opportunity for additions, current facilities are underperforming and not maximizing their potential.
- Envisioning the future might entail additional benefits for both the district and the community. With a new recent addition, Crim Elementary School could potentially accommodate district offices, pre-kindergarten students, and serve as an autism center. This transition could yield cost savings by relocating district offices to a district-owned facility, while expanding resources for district families. The replacement of Kenwood and Conneaut, along with the inclusion of students from Crim, would remain under consideration.
- Previously mentioned was the concept of consolidating all students into a single building. Although this deviates from the idea of individual neighborhood schools, it ensures equal access to resources. This approach could potentially reduce maintenance costs, but it raises concerns about managing a single elementary school with over 1,000 students. Strategies involving the creation of smaller cohorts within a unified school environment could emulate the neighborhood concept while maintaining efficiency.

EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL

CONCEPTUAL DESIGN

The conceptual design for the new Bowling Green High School supports a changing educational vision for Bowling Green City Schools by focusing on alignment of the built environment to support teaching and learning for the whole student within a values system that prioritizes adaptability, equitable access to quality education, and career and college readiness.

The design is strongly influenced by the natural systems surrounding Bowling Green and a legacy of placemaking in agriculture. The presence and evolution of the Great Black Swamp and history of working the land informed space planning strategies and selection of materials.

Guiding design principles included:

- Use and elevation of natural materials and textures.
- Presence and emphasis on community and collaborative areas.
- Building circulation (pathways) reminiscent of a journey through nature.
- Design moments that are intentional.
- Sense of pride in place and belonging.
- Celebrating the Bowling Green story.



Image References (Next Page)

A. Missouri Innovation Campus
Lee's Summit, MO
B. Capital City High School
Jefferson City, MO
C. Tahoma High School and
Regional Learning Center
Maple Valley, WA
D. Turner Middle School
Kansas City, MO
E. Liberty High School
East Baton Rouge, LA

F. Joplin High School
Joplin, MO
G. Salina Central High School
Salina, KS
H. Topeka Center for Advanced
Learning and Careers
Topeka, KS
I. Jefferson High School
Sioux Falls, SD

The development of organizational themes guided creative thinking and decision making. These themes included concepts of pathways, hubs, and attention to context.



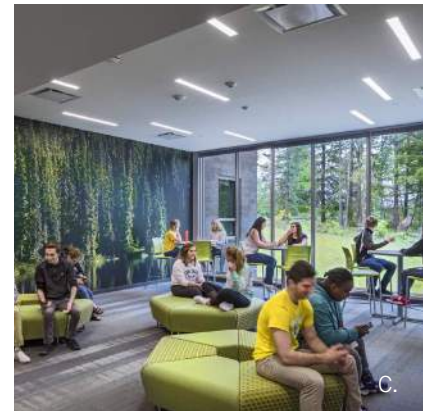
PATHWAYS

Student to student; student to teachers/staff; faculty to faculty.



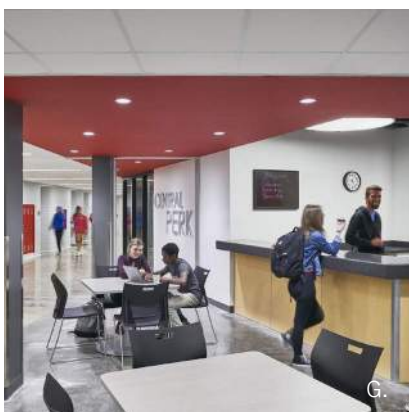
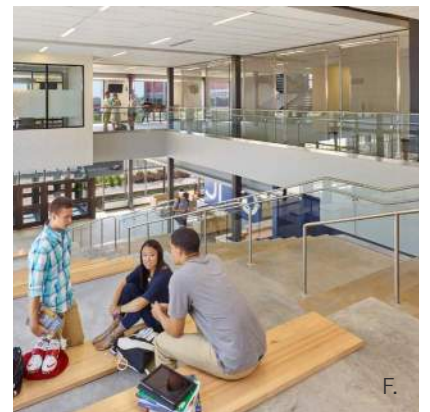
HUBS

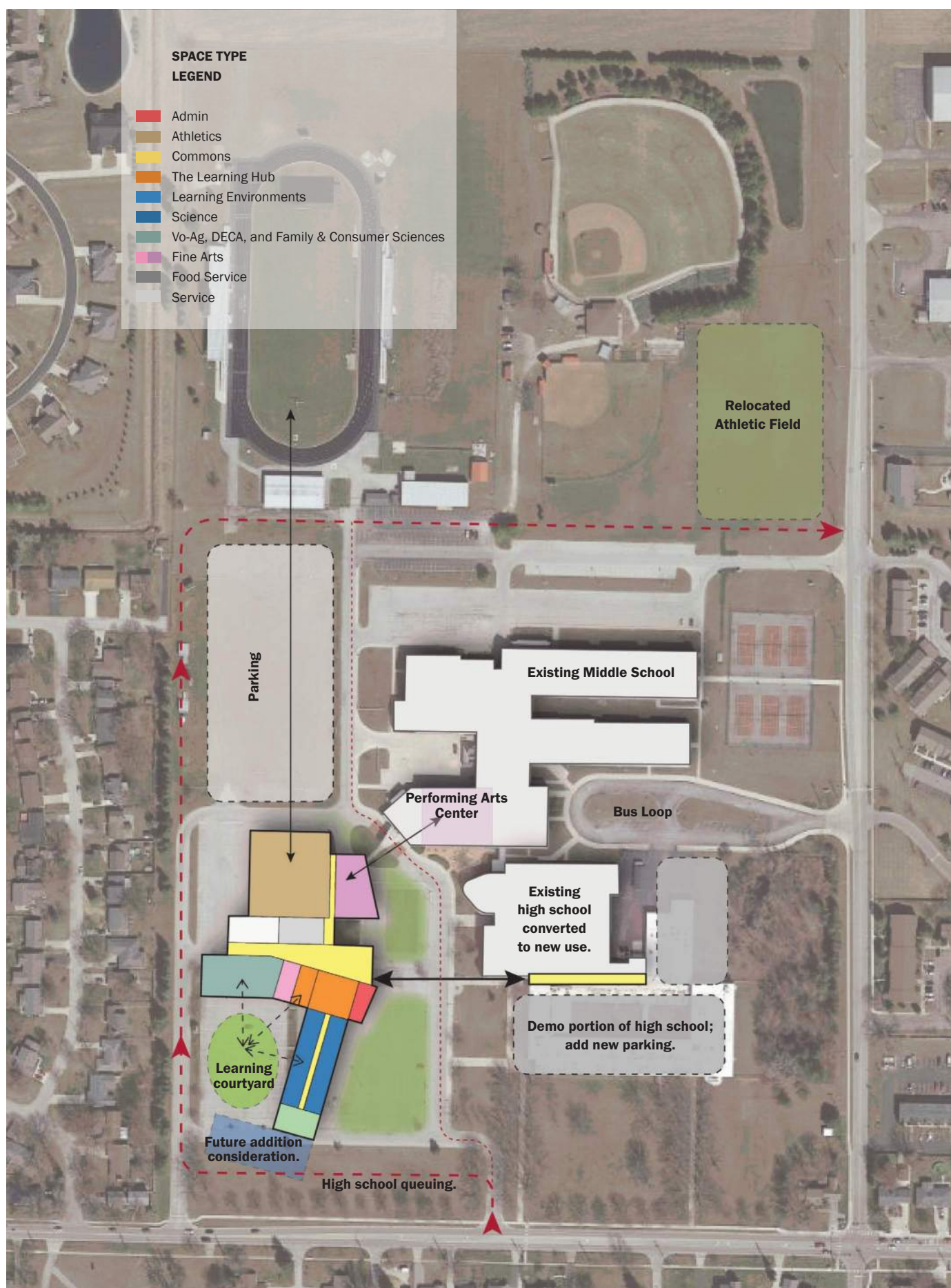
Community connectors.



CONTEXT

Site campus, community; district and city history.





The conceptual design for Bowling Green High School, as developed and informed through master plan visioning and engagement, recommends partial demolition and strategic retrofit of the existing high school building, with planned design and construction of a new high school proper. Through the planning process, all design decisions were vetted through a process of studying relative impact on learning, community, nature, and pride; the convergence of these ideas ensured that every next step aligned with the desired end goal.

The conceptual design proposed by this Educational Facility Master Plan required thoughtful and comprehensive understanding of siting and program influences.

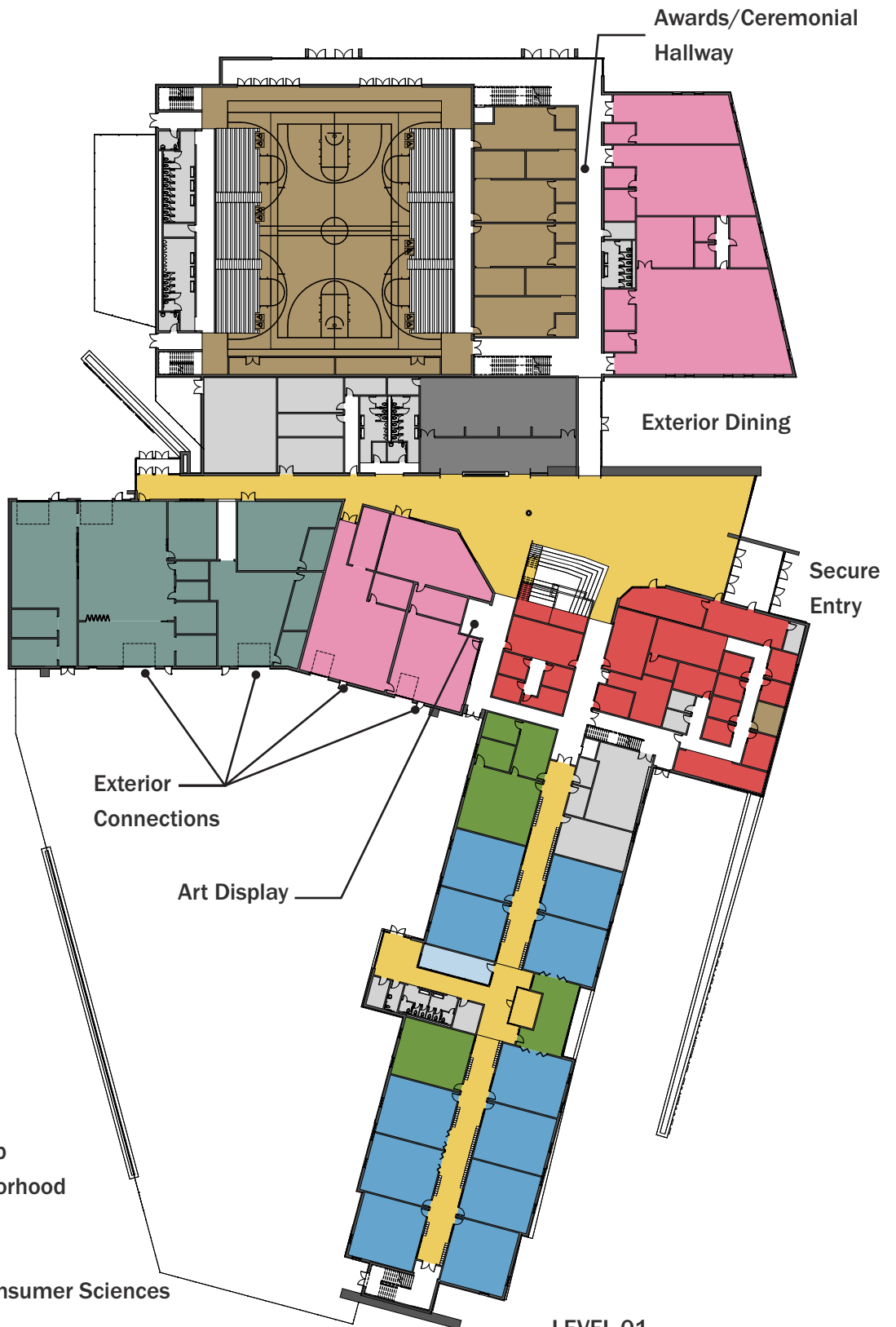
Important considerations included:

- Gymnasium at north side of site with relation to athletic fields.
- Music and performing arts near the Performing Arts Center.
- Vo-Ag, DECA, and Family and Consumer Sciences program spaces are occasionally used by the community and industry stakeholders.
- Media/Business/STEM as HUB with the most adjacencies.
- Courtyard space with relationship to Science and Vo-Ag programs for plant studies.
- Buffer between three-story portion of high school building and adjacent neighboring homes.
- Learning neighborhood pods need to be sited for potential future additions.
- Transition of public versus private zones and creating secure areas for students.



EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL



SPACE TYPE LEGEND

- Admin
- Athletics
- Commons
- The Learning Hub
- Learning Neighborhood
- Science
- Vo-Ag, DECA,
and Family & Consumer Sciences
- SPED
- Fine Arts
- Food Service
- Service

LEVEL 01

*Not to scale.

CONCEPTUAL FLOOR PLANS

What are the Planning and Design Strategies that support Bowling Green City Schools' vision for Teaching and Learning?

Administration

Administration serves as the primary point of entry with a secure entry vestibule supporting administrative and functional responsibilities associated with school operations. The suite also incorporates health and guidance spaces, both strategically placed for ease of access by students. With safety and security at the forefront, the lobby and key offices will have passive surveillance of the entry and exterior courtyard areas.

Commons

The commons is a unique space providing students and teachers great opportunity and flexibility of use. Primarily, the commons will serve as the dining space with direct connections to food service and exterior courtyards. To maximize utilization of space, outside of lunch periods, the commons may be used for large group instruction, collaboration amongst classes, presentations, district and community meetings, and other events. Flexible furnishings will support easy reconfiguration of space. With adjacency to The Learning Hub, fine arts, and Vo-Ag, DECA, and Family and Consumer Sciences, learning is celebrated and on display.

Food Service

Food service incorporates the serving area and kitchen spaces. The vision for the serving area is to provide a food court experience and omit the traditional serving lines. The food court is open to the commons and will be designed to reduce student congestion and interference with tables and chairs.

Vo-Ag, DECA, and Family & Consumer Sciences

Vo-Ag, DECA, and Family & Consumer Sciences are all programs currently offered at Bowling Green High School and will continue to be offered with expanded flexibility of space at the new high school. These spaces will be celebrated and more visible to all students. Adjacency of spaces to the commons and The Learning Hub will offer more dynamic opportunity for cross curricular collaboration. Also, these spaces have direct access to exterior loading and courtyards for projects. The courtyard offers cross-over with the science department in plant studies.

SPED

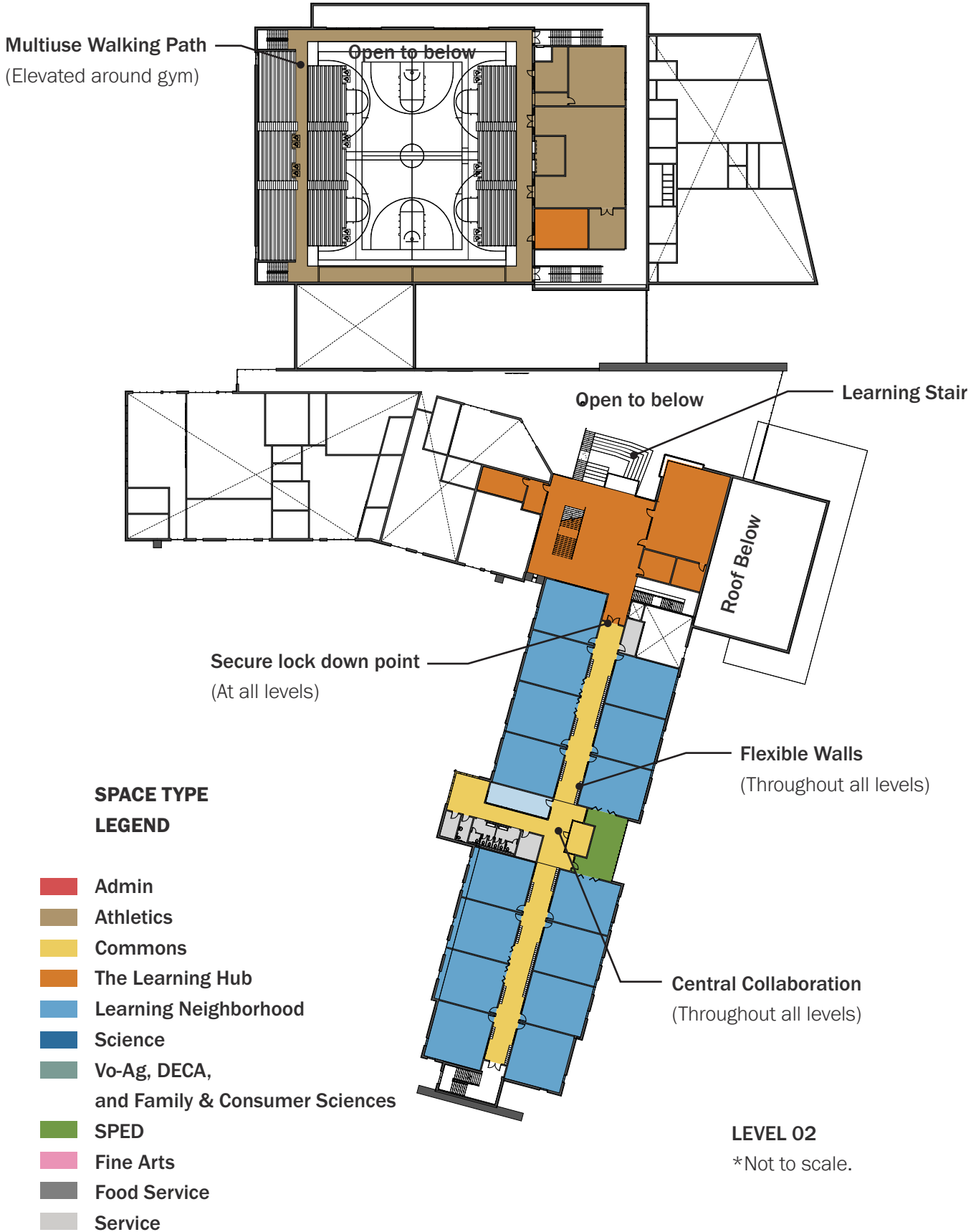
The majority of the SPED spaces is strategically located on the first floor for ease of accessibility and to allow for close proximity to school resources such as guidance, health, commons, etc. Resource spaces will be distributed allowing teachers the ability to better support students and feel more integrated in the departments where they co-teach. Integration is key in ensuring all students have peer to peer interaction and the same opportunities educationally.

Fine Arts

Fine arts incorporates classes in drawing, ceramics, music and drama. Spaces are located with consideration to shared resources, exterior courtyards, and adjacency to the Performing Arts Center and music program. In the proposed high school, the fine arts spaces and visibility to them will promote the celebration of student work and achievements with the design of an art gallery and ceremonial hallway.

EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL



CONCEPTUAL FLOOR PLANS

What are the Planning and Design Strategies that support Bowling Green City Schools' vision for Teaching and Learning?

Athletics

The athletics program offers direct entry from the parking lot and ample prefunction space before games. With 1,750 seats to host large competitions, the gymnasium has visitor seating on the east and a two tier bleacher section on the west for the home team. The main court runs north/south with two full size courts running east/west when the ground level bleachers are in the closed position. Seating at the second level may remain open for viewing of the two courts, but when closed may support indoor athletics activities or other departments as needed for large group activities. Elevated around the perimeter of the gym floor is a walking path allowing for further flexibility of indoor athletics and standing room and circulation for athletic events. Space for broadcasting is co-located with the athletics spaces and may be used by all departments within the high school.

The Learning Hub

The Learning Hub represents a three-story open-volume area that combines the functions of the media center, maker space, modular tech lab, and business classrooms. Positioned as the focal point within the new high school, it functions as a valuable resource accessible to all departments. This expansive space begins with an ascent from the learning stair on the first level and extends seamlessly across the second and third levels. It offers various zones tailored for small, medium, and large student-centered learning groups.

Learning Neighborhood

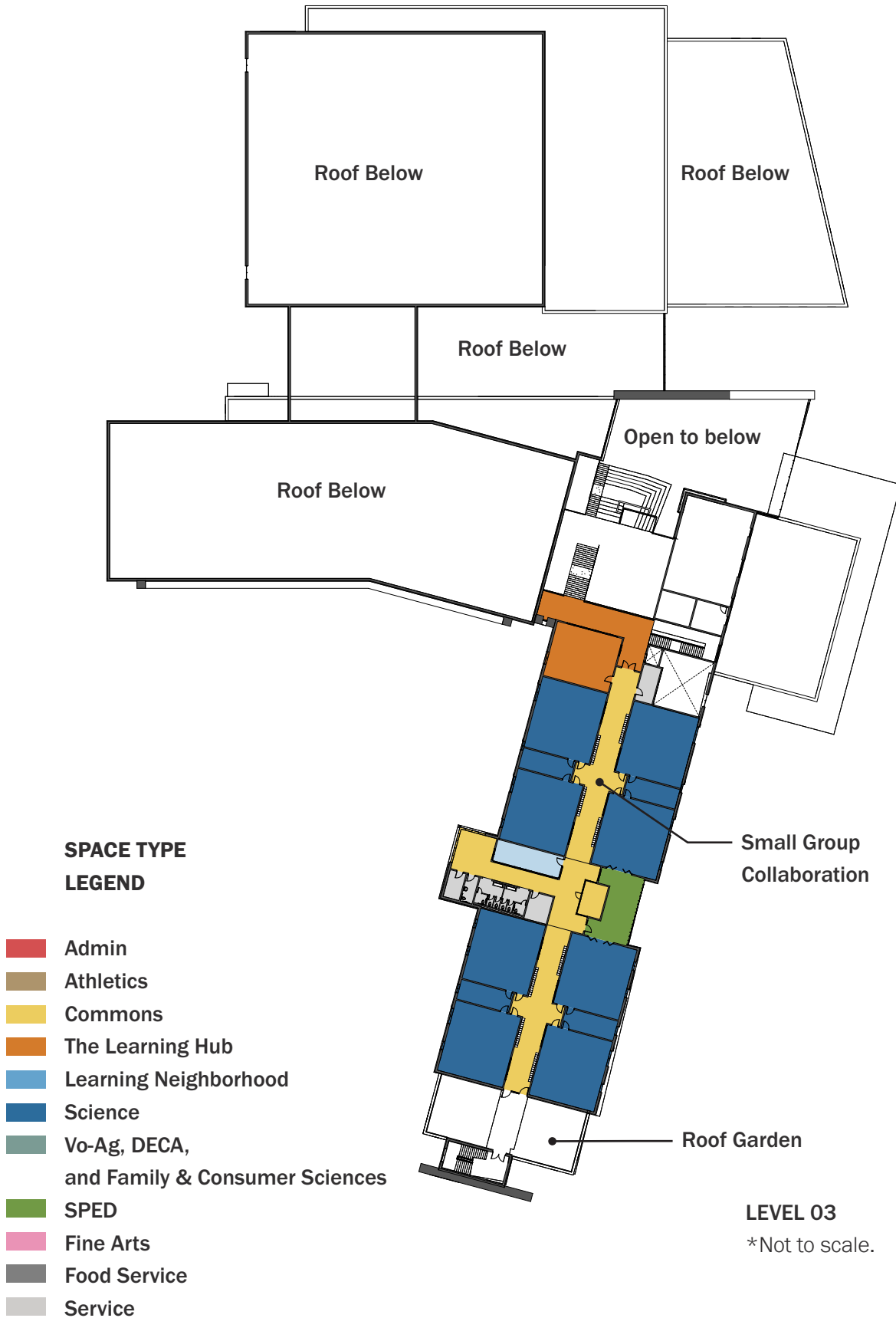
The learning neighborhood encompasses all general classroom spaces, including those for math, social studies, English, and foreign language. The design carefully considers arrangement of these spaces to cluster departments while maintaining flexibility to accommodate various team arrangements. The primary goal of this neighborhood is to enhance academic support for students.

To achieve this, the design incorporates flexible walls, ensures visibility into and out of spaces, and features central collaboration zones. The central hallway, serving as an extended learning area, functions as a pathway to encourage interactions among students, between students and teachers, and among teachers. In essence, the neighborhood is tailored to cater to the needs of the students, promoting a collaborative and engaging learning environment.

With safety and security in mind, the learning neighborhood at levels one and two, including the science labs at level three, has doors that can be closed and secured during an emergency.

EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL



CONCEPTUAL FLOOR PLANS

What are the Planning and Design Strategies that support Bowling Green City Schools' vision for teaching and learning?

Science

The science department is located on the third floor allowing for full departmental collaboration and the sharing of resources. A central collaboration area and small group collaboration spaces allow for students to extend beyond the lab for individual or group work. A shared roof deck offers direct connection to the exterior for extended learning opportunities and small projects while the grade level exterior courtyard to the west offers space for extensive plant studies and projects.

Service

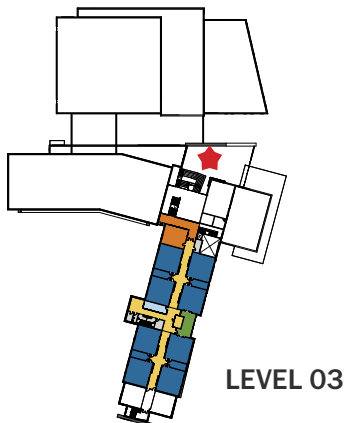
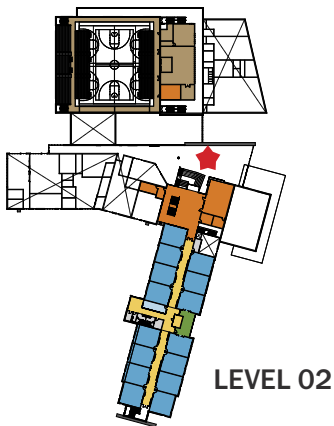
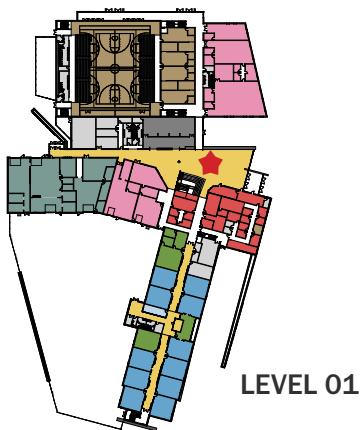
Service spaces are integral to the operations of a school facility and when incorporated with the user in mind can greatly improve the health of the building and its occupants. Service spaces include restrooms (single use and group), mechanical/electrical/IT rooms, storage, and janitor closets. These spaces are distributed throughout the building.

Collaboration

Across all departments, whether it be in the classroom, laboratory, or the various transitional spaces and hallways, the new high school fosters space flexibility to facilitate collaboration across all departments and grade levels. The confines of traditional classrooms and labs will no longer restrict teaching and learning. Students and teachers will enjoy the freedom to choose how they utilize spaces thanks to movable walls and partitions, a wide range of flexible furnishings, and outdoor learning courtyards. Teachers will have designated areas for peer-to-peer collaboration outside of their classrooms, further promoting professional growth and development opportunities.

EXPANDED RECOMMENDATIONS BOWLING GREEN HIGH SCHOOL

THE LEARNING HUB



★ Referencing image on adjacent page;
you are here.



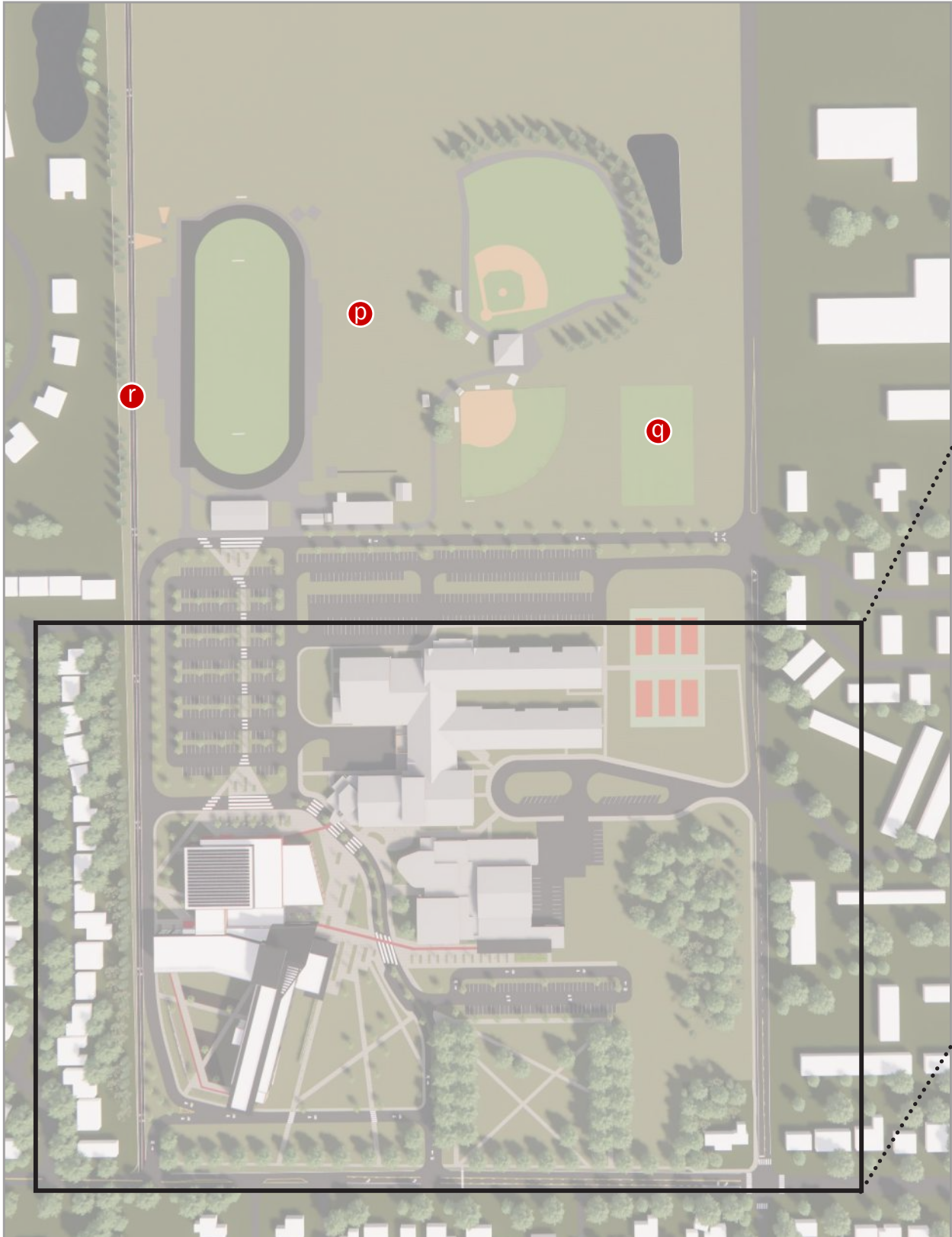
*"The Learning Hub serves as a catalyst to providing dynamic learning opportunities across all departments.
This is the heart of Bowling Green High School."*

Dusty Lake, DLR Group

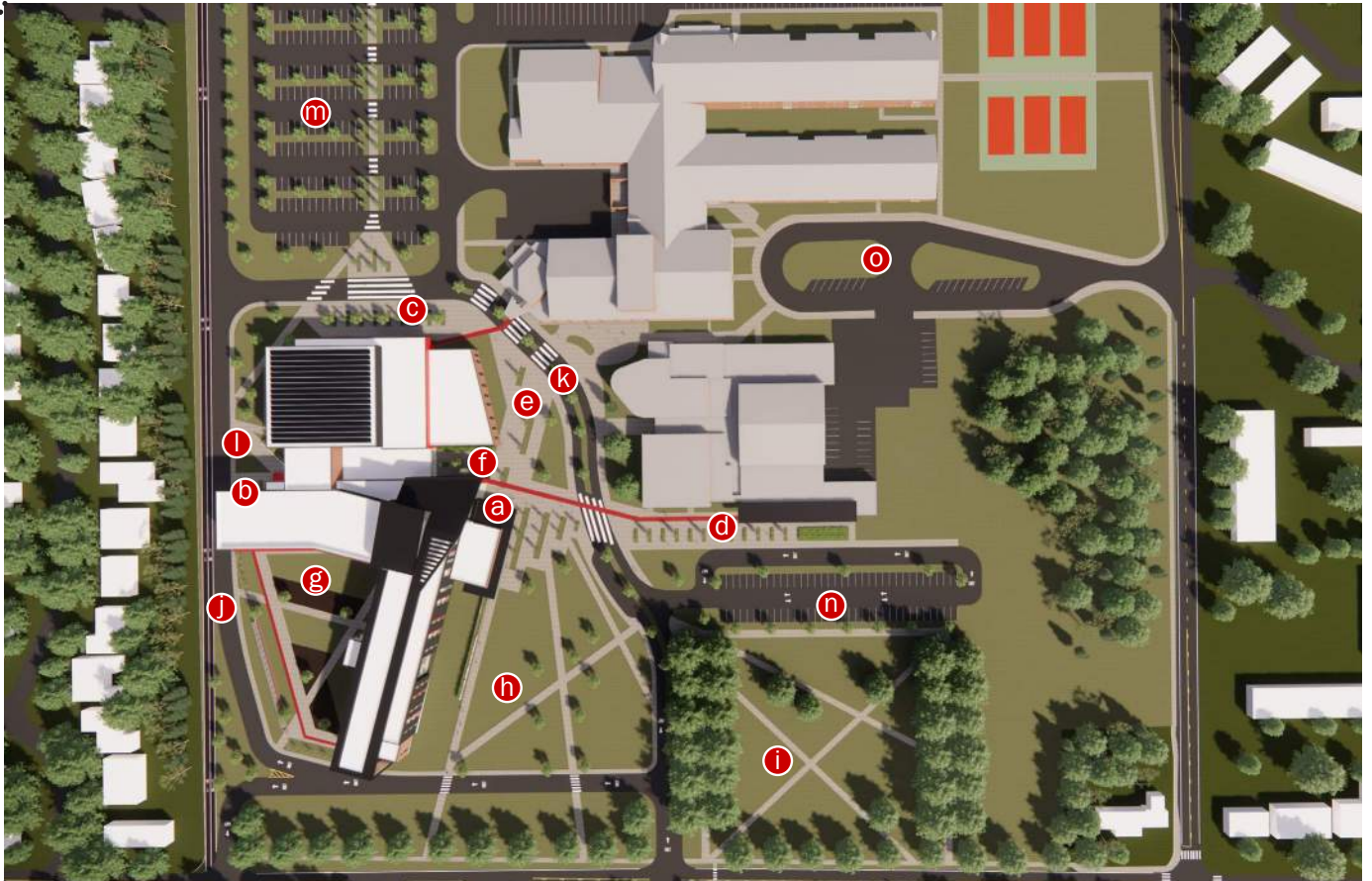


EXPANDED RECOMMENDATIONS BOWLING GREEN HIGH SCHOOL

North



North



*Not to scale.

SITE PLAN LEGEND

- | | | | |
|--------------------------------------|-----------------------------|--|--|
| a New High School Entry | e Main campus plaza | i Enhanced existing quad | m New parking and geothermal well field |
| b High School secondary entry | f Outdoor dining | j HS drop-off/pick-up drive | n New activity center parking |
| c Athletics entry and plaza | g Learning courtyard | k Campus boulevard with pedestrian crosswalks | o Existing MS/HS bus loop |
| d BGCS Activity Center entry | h New campus quad | l Loading / Receiving | p Existing athletic fields |
| | | | q Relocated athletic field |
| | | | r New city bike path |



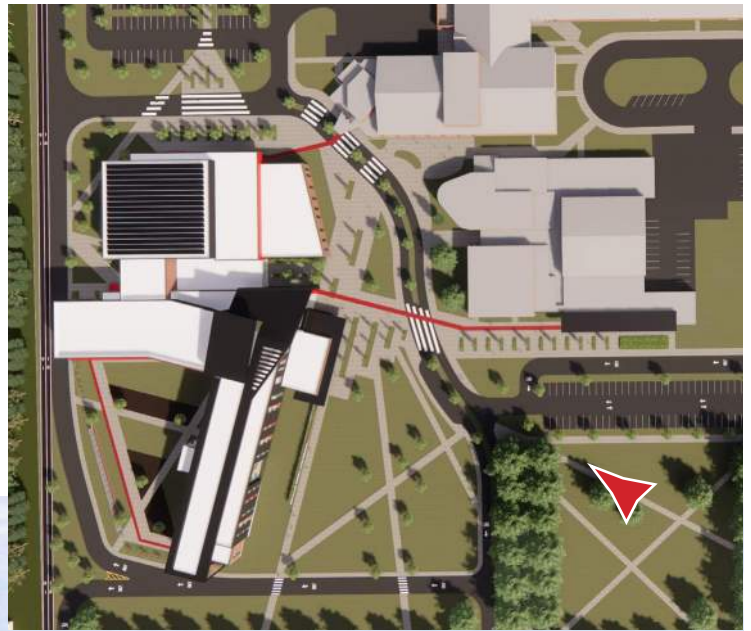
Scan the QR Code for an opportunity to view a video flyover of the new Bowling Green High School. The video showcases a 360 degree view of the building , site, and portions of the interior.

See page 60 for p, q, and r keynotes.

EXPANDED RECOMMENDATIONS

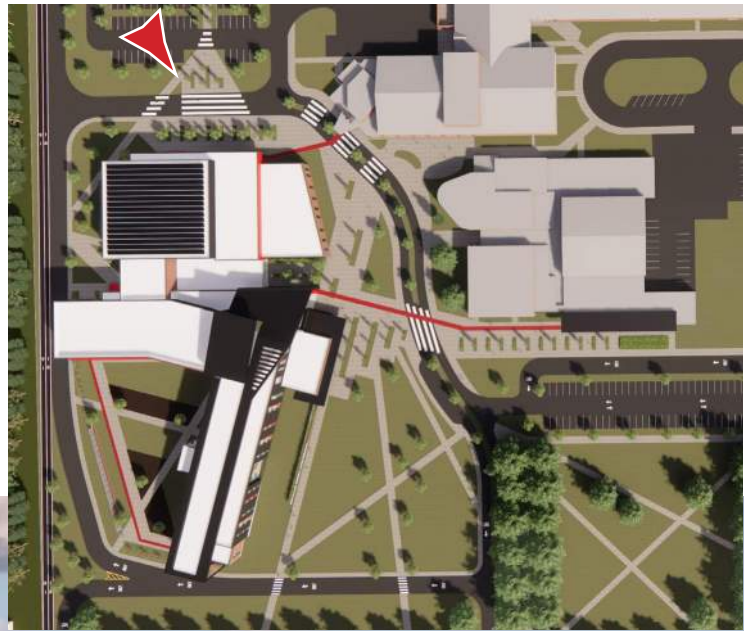
BOWLING GREEN HIGH SCHOOL





EXPANDED RECOMMENDATIONS BOWLING GREEN HIGH SCHOOL





EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL

CONVERGENCE

Bowling Green High School stands as a singular entity, and as it embarks on a new chapter, there lies a unique opportunity to craft a distinctive space for BGCS students as they approach the culmination of their journey within the district. The architectural form and material choices of the new high school have been meticulously orchestrated not only to accommodate the forward-looking learner but also to celebrate the concepts of learning, nature, pride, and community. The design's convergence embodies the act of bringing people together while spotlighting significant moments within the school's walls.

Each material and branding aspect serves a purpose, a conscious link to one of the four elements at the heart of Convergence's essence.

LEARNING
CONVERGENCE
COMMUNITY
NATURE
PRIDE



A.

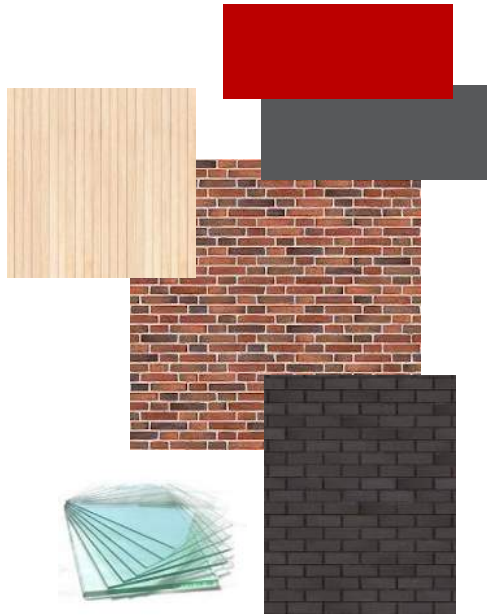


B.



C.





Exterior Branding:
 A. BGCS District Seal
 B. Red Paw on White
 C. Interlocking BG

MINE SHAFT BRICK

Drawing inspiration from a BGCS secondary color, the darker brick is a primary building material, celebrating the high school as a new building with visual contrast from existing. This brick also compliments the Orange Pepper Brick.

ORANGE PEPPER BRICK

Existing brick at the middle school and new BGCS Activity Center. This brick is a secondary material and connects the new high school with the existing buildings on site. Specifically, this brick is used at the music spaces to visually connect with the adjacent middle school auditorium.

SCARLET METAL PANEL AND SITE PAVING

BGCS' primary color, scarlet, is used strategically to highlight areas of convergence. The metal panel is being used at pathways to accentuate learning within the school. It then transfers to the ground as site paving to reinforce connections across the campus. Scarlet is BGCS and when used as a primary building material color, will inspire pride.

MINE SHAFT METAL PANEL

Mine Shaft is also being used as a tertiary building material in the form of another metal panel and/or paint color. These materials complement the Mine Shaft Brick and offer a transition in material type where brick would otherwise feel too heavy.

WOOD-LOOK METAL PANEL

Another metal panel option is one that has the appearance of wood. In contrast to brick, a material resembling wood brings a lightness to the building that can complement the other building materials and encapsulate the interior of the commons space. The material can be seen transferring from exterior to interior as a continuous element.

GLAZING

Natural daylight and views to the exterior is linked to positively impacting student learning retention. The glazing placement at the new high school emphasizes interior spaces and draws attention to the entry, commons, and the learning hub. Careful consideration and review will be required to study visibility relative to safety and security.



**CONVERGENCE IS AN
ARCHITECTURAL CONCEPT
DEVELOPED TO CREATE
A BGCS CAMPUS THAT
DRIVES STUDENTS AND THE
COMMUNITY TO THE FUTURE.**

George Rishmawi
DLR Group



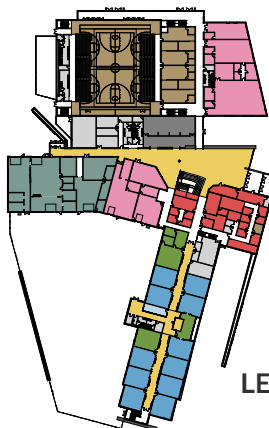


EXPANDED RECOMMENDATIONS

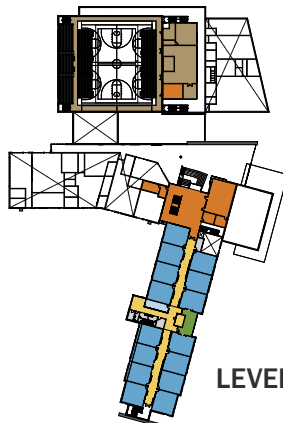
BOWLING GREEN HIGH SCHOOL

PROGRAM OF REQUIREMENTS

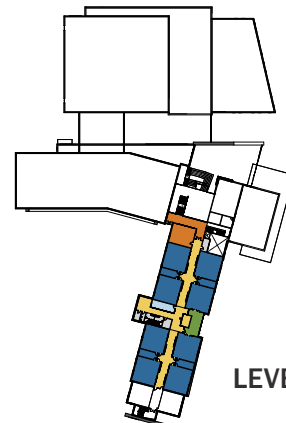
PROGRAM AREA		EXISTING BG HS SF	REQUESTED	SUGGESTED BASED ON 150,000 SF
H-AD	Administrative Spaces	5,655	5,730	4,670
H-AC	Academic Core Spaces	33,275	37,690	33,880
H-SE	Special Education Spaces	5,807	5,500	3,850
H-MC	Media Center Spaces	4,817	4,368	4,570
H-VA	Visual Arts Spaces	6,558	5,000	5,000
H-MU	Music Spaces	10,369	10,850	6,390
H-TE	Technology Education Spaces	8,413	11,770	7,540
H-BE	Business Education Spaces	2,961	2,210	2,010
H-FCS	Family and Consumer Science Spaces	1,134	2,800	1,600
H-SD	Student Dining Spaces	4,976	5,680	5,080
H-PE	Physical Education Spaces	28,695	30,470	25,370
H-FS	Food Service Spaces	2,188	3,043	3,015
H-CU	Custodial Spaces	0	500	500
Program Subtotal		114,848	125,611	103,475
H-BS	Building Services	38,762	40,196	32,732
Facility Total		153,610	165,807	136,207
*Construction Factor (11% multiplied by the facility total)		0.16	0.11	0.11
Gross Square Feet (GSF) Developed		178,184	184,045	151,190
<i>Difference of Square footage from targeted 150K</i>		28,184	34,045	1,190



LEVEL 01



LEVEL 02



LEVEL 03

The proposed Bowling Green High School is a 150,000 SF facility incorporating departments currently in the existing high school with the addition of new program spaces. Determining this square footage involved a meticulous evaluation of the existing high school and the requirements identified during focus group meetings. It is worth highlighting that the programmed space square footages were cross-referenced with OFCC's recommended square footages, which are based on the district's enrollment figures.

In addition, an assessment of student capacity and utilization was conducted to ensure that the new high school would be appropriately sized for its opening day and allow for some flexibility to accommodate growth. Please refer to the chart below for the analysis of capacity and utilization. The proposed high school, although smaller in size compared to existing, optimizes space utilization, enhances efficiency, and has the capacity to accommodate 809 to 1,005 students.

PROGRAM AREA		OFCC EX FOR DIFF BGCS ENROLLMENT PROJECTIONS		
		5YR ENROLL: 610 149 CT	10YR ENROLL: 642 148 CT	PreCovid Enroll: 750 100 CT
H-AD	Administrative Spaces	4,415	4,415	4,415
H-AC	Academic Core Spaces	27,570	29,495	32,620
H-SE	Special Education Spaces	3,100	3,100	3,100
H-MC	Media Center Spaces	4,405	4,630	4,930
H-VA	Visual Arts Spaces	2,900	2,900	2,900
H-MU	Music Spaces	4,970	4,970	4,970
H-TE	Technology Education Spaces	3,600	3,600	7,200
H-BE	Business Education Spaces	2,100	2,100	2,100
H-FCS	Family and Consumer Science Spaces	1,600	1,600	2,800
H-SD	Student Dining Spaces	5,372	5,809	6,247
H-PE	Physical Education Spaces	16,950	16,950	16,950
H-FS	Food Service Spaces	2,490	2,753	3,015
H-CU	Custodial Spaces	500	500	500
Program Subtotal		79,972	82,822	91,747
H-BS	Building Services	25,423	26,290	29,003
		105,395	109,111	120,750
		0.11	0.11	0.11
		116,989	121,114	134,032

PROGRAM AREA	EXISTING BG HS SF	REQUESTED	SUGGESTED BASED ON 150,000 SF
<i># of Teaching Spaces</i>	50	53	49
<i>Total Student Capacity @ 22/class & 75% utilization</i>	825	875	809
<i>Total Student Capacity @ 25/class & 75% utilization</i>	938	994	919
<i>Total Student Capacity @ 22/class & 82% utilization</i>	902	956	884
<i>Total Student Capacity @ 25/class & 82% utilization</i>	1025	1087	1005

Teaching Space Size Analysis:

Existing core academic teaching spaces:

711 sf → 22 students

Suggested new core academic teaching spaces:

810 sf → 26 students

Notes:

- The 50 existing teaching spaces include the Auxiliary Gym, while the 49 suggested does not.
- There are 5 additional existing teaching spaces that exist above the 50 that are currently not assigned to regular classes.
- 75% Utilization Rate reflects the current utilization of teaching spaces.
- 82% is the Suggested Utilization Rate. This represents core classrooms being utilized 85% (6/7 bells) and specialized teaching spaces utilized at 75% (5/7 bells).

EXPANDED RECOMMENDATIONS

BOWLING GREEN HIGH SCHOOL

COST ANALYSIS

As part of the program requirements development, a cost analysis was conducted to ensure alignment between the district budget and the total site scope and gross square footages of renovation and new facilities. Cost per square footage was calculated using the 2023 Design Manual Update provided by the Ohio Facilities Construction Commission as a baseline. This summary accounts for regional factors that may impact cost and has been developed with input from architects, engineers, and construction professionals throughout Ohio.

WHY ARE WE SAVING A PORTION OF THE EXISTING HIGH SCHOOL?

The cost to renovate approximately 54,000 SF of the existing high school transforming it into a new Activity Center would only afford BGCS about 14,000 SF at the new high school. Keeping a portion of the existing high school provides the district more space to use internally and externally furthering the commitment to support students, teachers, and the community.



\$1,238,492	Demo/Abatement of existing HS Core Academic
\$4,981,118	Conversion of exist. HS into BGCS Activity Center (approx. 54,000 SF)
\$824,739	New BGCS Activity Center Entrance (approx. 2,000 SF)
\$62,319,332	New HS and Site Development
\$3,436,320	5% Contingency
\$72,800,000	TOTAL



Beth McIntosh
Bowling Green High School Teacher





APPENDIX





X.

FOCUS GROUPS

Academics and General Education	78
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Athletics and Physical Education	84
Computer Science/Media	88
Food Service and Dining	90
Performing Arts	92
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SPED	100
Vo-Ag, DECA, and FCS	104

VISIONING REPORTS

Teaching and Learning Visioning VALUES

ACADEMICS AND GENERAL EDUCATION

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Academics and General Education



Attendees:

Debbie Mathias, Teacher (Social Studies)
Bowling Green High School

Jeff Nichols, Teacher (Social Studies)
Bowling Green High School

Shawn Kiss, Teacher (Math)
Bowling Green High School

Daniel Black, Principal
Bowling Green High School

DLR Group:
Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Academics/General Education focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

The way that I have my classroom set up requires some flexibility with the furniture that is in there; I need to be able to move it around the room. Also, one of my biggest challenges is not enough working outlets. We struggle with the one-to-one model when devices can't be plugged in. We need outlets close to desk spaces, etc. I would love to have a larger room and perhaps a common space area where teachers could take their classes with individual rooms where kids could break off. In general, I think our classrooms are small. The natural light in my classroom is really good; I have big, tall windows. The air quality has gotten better since we have added AC to individual rooms. My air quality is better with the carpets removed. I have enough storage.

Another perspective...my room has thirty desks; and there is not enough room. It is difficult to move around with classes up to 27 kids. My classes are as small as eight and as big as 27. It is very difficult to do group work because it's too loud. My classroom is also used to watch sports footage, etc. We have good tech (smart boards); they are nice but with space restrictions, I am limited to staying up in the front of the room to teach.

ACADEMICS AND GENERAL EDUCATION CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Outlets are an issue. Air quality is better than it was...I share a wall with our boiler room and that's not always great. Natural light for me is limited. The room doesn't get circulation when windows are open and the room gets stuffy.

I like some of the tech that we have. Some of it is movable. Some classrooms still have chalkboards. My biggest frustration is how much space I have, when trying to move toward a student-centered classroom. Group work and self-discovery and hard to do when kids are on top of each other and it's really loud.

Another perspective...prior to supporting social studies, my room was for accounting, so I have 32 outlets. Now with the AC mini-split, the air quality is much better than it ever was before. If my room was 10-15' longer, it would be much easier to navigate activities more in line with today's learning. And to get kids up and moving to keep them on task. I usually have 25-30 kids. Natural lighting is ok for me.

Some teachers do team teach, for example there is some team teaching between Social Studies and English. All of our teachers have adjusted to our facilities...in the Social Studies department, test scores have been good in comparison to the other districts. Teachers are still building relationships and kids are still learning in the classroom, even if they're not learning as much as they could if we had more technology/spaces, etc.

Getting outside can sometimes create issues in kids being distracted/student allergies/having places to sit, etc. When outside, we can't access school Internet.

18-22 students is the desired class size.

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

We like the idea of commons spaces for collaboration. I like the idea of central space outside of our classroom with areas for students to break out. I also like the idea of having spaces within our own classrooms for small group/more private collaborative work. Safety and security must remain at the forefront of decision making.

I like the idea that there is some sort of professional development space where a group of teachers could get together, but I would like to have my own classroom where there are things I don't have to always pick up and move. I've taught several different ways. The change of something different would be hard for me and I like that I have a place to come back to. I like having my own space.

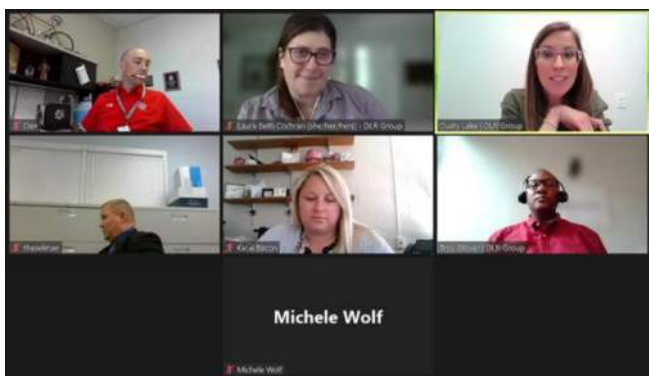
I could see a lot of use for learning stairs...a space like this would allow us to do more inquiry work.

An outdoor commons space could be most beneficial to us across from outdoor eating/cafeteria.

ADMINISTRATION

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Administration



Attendees:

Katie Bacon, Outgoing Assistant Principal
Bowling Green High School

Michele Wolf, Athletic Director
Bowling Green High School

Ted Haselman, Superintendent
Bowling Green High School

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

DLR Group:
Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Administrative focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

All admin staff are in office. One of the secretaries is part time but she still needs a dedicated space. We have a copy room, book storage, and a restroom. We use this restroom as a transgender restroom as well.

We like the safety feature having to be buzzed into the building. We like that senior leadership has sight lines to the entry of building and ability to look out the window and see who/what is coming. We like that we have front secretaries right inside the door.

It's good that visitors can't see directly into leadership offices--requires a screening process.

That said, our principal and assistant principal do not have enough privacy and their offices are not sound proof--having some separation for privacy is important. Scans of documents happen in the Principal's office due to the location of the copier.

We do not have a security office for a school resource officer.

We like that our Athletic Director and her secretary are in the main office. We need her (Athletic Director) support for some building admin duties. 50% of people coming in are here to see the Athletic Director.

ADMINISTRATION CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

It is important that we have a conference room here. We also need storage. And a space for the PA system, copier, Chromebook cart, etc--a work room.

For our office spaces, we would like to have desk/table spaces to meet with parents and a TV/presentation space in the main offices and in guidance offices.

The district SRO does not currently have an office. One should be provided and it could be used by probation officers as well.

The office houses 1-3 student aids per hour. (Students run passes, etc.)

Counselors are not housed in the main office and we would like to keep the departments separate. Currently, they are across the hall. This distance is important. We don't want to blur the lines between counseling/disciplinary action.

We have three counselors, an office manager for counseling, and a school psychologist. Our school psychologist is shared with middle school, but only offices in the high school.

A dedicated guidance counselor room would be good. Frequently, we have guidance interns. We need a fourth guidance counselor office and space to support our mental health counselor.

Echo, with emphasis, on need for spaces for guidance and technology in the main office.

Right now, the athletics configuration works well.

The nurse's office is currently located near admin/counseling. We re-purposed a computer lab to the nurse's office. This space should remain close to the entrance.

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

We want a front entry that works and is more inviting and we want to remain centralized.

Windows! Daylight for mental health and for security—ability to see out. It would be nice to have more than one bathroom. Our current bathroom is overused and supports a lot of student use.

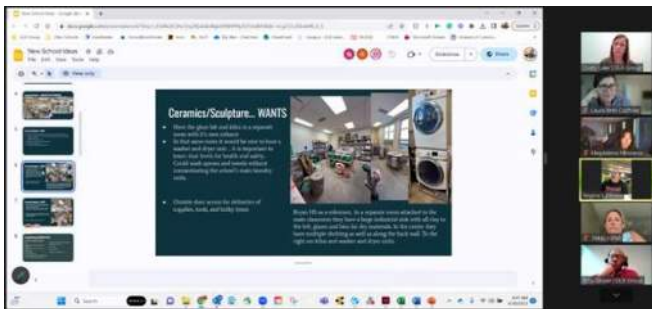
We would like to incorporate a staff mail room and small kitchen area (sink/microwave/fridge) in the main office for office staff and teachers to use. We like the mail room being attached to the main office. This configuration would mean more opportunity for interface between leadership and staff.

Goal: Having space to grow.

We want to provide for the ability for an addition in the future and have planned for it--when we add on, this is where it would/will happen.

We are the least staffed office, as compared to schools around us. Our admin to school ratio shows that there is need for more help.

ART

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS**Subject Area: Art****Attendees:**

Nikki Meyers, Teacher
(Design/Metal Working/Jewelry/Sculpture)
Bowling Green High School

Regina Hilton, Teacher (Clay Sculpture)
Bowling Green High School

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

*The second capture above highlights a presentation that BGCS Art staff prepared in preparation of the meeting.

DLR Group:

Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Art focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

Art classes have 24 students per class (max).

Sculpture does not currently use the school system to wash because we worry about clogging pipes.

Air quality is an issue, dealing with years of built-up dust. We do not have good temperature control in our rooms. Moving forward, we should prioritize appropriate ventilation.

Presently, Drawing/Painting is connected/next to Metals/Design. All classes have enough seating for 24 kids. The Drawing/Painting classroom does have ability to move furniture and does have supportive tech. This classroom also has vertical storage.

All three Art teachers teach the same kids throughout the year. Clay/Sculpture is close to Vo-Ag and this adjacency makes sense next to all of the arts. Vo-Ag (welding) and arts coursework could overlap, for jewelry and larger sculptures.

ART CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Every 12 weeks, we switch our schedules. Kids rotate and teachers stay in the same place. That way, by the end of the year, kids are exposed to all three areas. Our program serves 350-400 kids between all three teachers. School runs on 9-week quarters, but arts runs on trimesters.

Right now access to the general printer is through the art store room and storage room.

Ventilation in the metals room can be suffocating and sometimes these spaces get very dirty.

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

It would be wonderful to have split-room situations that provide separate spaces for design work and making. Looking to the future, I would like a facility that has the kilns and glaze lab in a separate room, with an entrance through the classroom. I would like back-door access to the classroom for large deliveries. Overhead power is needed as well. I would also like a washer/dryer hookup. We should have a classroom equipped with 24 wheels so that all students can participate at one time. My preference would be to have movable furniture where possible.

Disciplines could share a spray booth, but Clay/ Sculpture would need it's own as different materials/ filters are required. Painting and drawing would like to add a spray booth.

The art classrooms would benefit from more windows and more natural lighting--more supportive of art.

We would like to have floor easels out of the hallway and into the room.

We would like mobile furniture and wall display.

Metals/Design needs furniture to support metal working and design. The kids move around the room a good deal.

We want to have enough space with room to grow... with potential to set up a print shop. (Ideally would go in metals/design lab.--in future, part of graphic design lab. Could do paper prototyping, etc...) We would like to get some kind of printing system where we could print in the district, a large format printer. This could allow us to set up a production/completion print shop and work more directly with Computer Science. Adjacency to Computer Science would be our preference. A computer lab would be used as well.

We would like to expand sculpture. We would like to learn how to do raku firings outside, perhaps a courtyard situation could support this? We love the idea of the art patio to draw or paint outside.

We do occasionally have visitors/local artists. We have had artists come in and do demonstrations and work with the kids.

iPads work with Adobe suite.

APPENDIX: FOCUS GROUPS

ATHLETICS AND PHYSICAL EDUCATION BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area:

Athletics and Physical Education



Attendees:

Daniel Black

Principal, Bowling Green High School

Michele Wolf

Athletic Director, Bowling Green High School

Magdalena Meszaros

Bowling Green High School Graduate

Dusty Lake, AIA, ALEP

K-12 Education Client Leader

Troy Glover

Planner

Laura Beth Cochran, AIA, NCARB

Architect

The Athletics and Physical Education focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

Bowling Green High School is in a prime location in our NW athletic district to host a lot of high level tournament games. Facilities are important: seating, lighting, audio.

There is a large event that we used to host ten years ago. That event now rents facilities from BGSU, as the host has to be able to fit three wrestling mats lengthwise. In the future, we would like to be able to host that event here again.

Future efforts should consider details like the weight of carbon poles for a volleyball net system, versus steel ones--about half as much. We want to make sure that we're evaluating some of these types of components to eliminate potential for damage, etc.

Right now, we have five locker rooms. Locker rooms are divided between varsity teams and general PE. Varsity spaces sometimes require additional support equipment. Coaching offices should have a restroom and a shower.

Ideally, PE should have its own separate locker room from varsity. Acoustics between locker rooms must be considered, especially when hosting competing teams.

ATHLETICS AND PHYSICAL EDUCATION CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

We are currently able to separate people by space, making sure that kids enter the gym through separate corners...this is working really well. Opposing kids do not cross each other or other fans.

Right now, egress is a little tight...there are two doors that go to the main hallway but also two sets of side doors and these really help with traffic control...currently the gym is narrow. But we like that we have four exits and this helps considerably with traffic. Concessions and restrooms are right outside of the gym. Just pinched in. We would benefit from a bit more elbow room.

Our floor space, when you are entering/exiting the gym finds you walking within a foot of playing surface.

We don't have storage for shootaways for basketball. Definitely need storage for larger athletic pieces right off of the gym.

We have adequate space outdoors but we need to work on the quality of the ground internally. We are in a position where we are bringing outdoor youth teams in to practice in the evenings and this causes no interference with ongoing high school events. Their ability to use our space means we can control costs for those kids/families. We don't want to lose space, but what we have is working well. We have sufficient outdoor space.

Football locker rooms are near the fields. Practice space and facilities are adequate. That building is showing it's age and having a lot of issues tripping breakers, water leakage, etc.

There are two different concession spaces that are generally pretty small--you can only fit five people in each space. The restroom spaces in that building are not good, very small, and not wheelchair accessible.

Wheelchair accessibility is an issue. We are grateful to have a washer and dryer out there but could use two more locker rooms out there. There are currently two and we have created a third out of a large storage room. We use the third in the spring.

Regarding safety and security, our current facility is difficult to navigate and accessibility is a major concern.

We do have adequate parking for big games. It's not direct (a bit off center) but sufficient. And we are doing better than many of our neighbors. Outside lighting is generally sufficient now also, having been updated to LEDs and put on a timer.

We need new stadium lights!

ATHLETICS AND PHYSICAL EDUCATION CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Our existing tennis courts were installed thirteen years ago; the base layer was not done well and no drainage was provided. The current infrastructure presents safety issues. To accommodate, we have been renting court space from BGSU.

Regarding ticket booths, we are digital but there is state initiative right now trying to outlaw electronic ticketing. We have two ticket booths at the stadium. We would love it if we had something more separate, more of a main entrance with a ticket booth that is very obvious what it is. The current configuration is kind of in hiding. Temperature control is a serious problem in the current ticket booths. Something freestanding at the exterior stadium would be amazing. Indoors, we just set up tables.

If it's raining, softball practices in the gym and the baseball team goes to a facility in town that they pay for with fundraising money. We only have one batting cage and we are limited on space for them to set up mounds, etc. Currently, we have 40-50 boys in our baseball program. Pre-season, they practice indoors at another facility.

Band currently practices in the parking lot but we could see them practicing on the field in the future.

ATHLETICS AND PHYSICAL EDUCATION CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

If it's possible, we would love to have an indoor track. That would be incredible. Truthfully, for off-season workouts, that would almost create another gym because there is so much that can happen in that space agility wise.

Additional multi-use space, for dance or cheerleading or additional agility space would be great. We are currently lacking cardio equipment. We don't have anywhere to put treadmills or aerodine bikes. Additionally, a training room for our athletic trainer that would also serve as their office will be needed. What we have right now is very large; if it were half as big as what we have now, that would be very sufficient.

There should be consideration for a performance weight room as well.

Dedicated classrooms adjacent to our facilities would be greatly used, for after school watching film and or for coaching sessions.

Addressing potential need for a press box area, if we have a second level track, there will be plenty of space for media there. We would like a higher ceiling than what we have currently. Note, BCSN is our league Buckeye Cable Sports Network; we are the first league that has a dedicated channel for high schools, broadcasting sports/band/choir/orchestra. In the future, BCSN will be at our facility more often than they currently are.

No red bleachers!

We have seen almost every school in NW Ohio within a 30 mile radius...our biggest observations are relative to extended learning areas and the flow of classrooms. We like the idea of having a multi-functional entryway, so when you come in, it's very athletically oriented...bright/natural light/awards...we want people to see what highlights our entire school. We want everything to have a feel of multi-use.

Thinking about expanded programming, we may investigate adding girls lacrosse in the near future, but we have what we need to support this. That said, we don't have the participation numbers to take it too seriously at this time.

COMPUTER SCIENCE/MEDIA

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Computer Science/Media



Attendees:

Corey Sexton, Library/Media Specialist
Bowling Green High School

K.C. Hale, Teacher (Computer Science)
Bowling Green High School

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

DLR Group:

Dusty Lake, AIA, ALEP (K-12 Education Client Leader)

Troy Glover (Planner)

Laura Beth Cochran, AIA, NCARB (Architect)

The Computer Science/Media focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

I feel like we've gone backwards...18 years ago, we had 30 desktops in the library, we did a lot of collaboration with the teachers, and had good relationships. When we updated the computers, there was a shift. Currently, we have four desktops (very archaic/very slow) and we are one-to-one with Chromebooks only. But Chromebooks do not support all the technology needed to do some really cool projects. I feel like I get to collaborate with teachers on research, but we really lack the technology. Being limited to Chromebooks is a challenge. Not having consistent access to software that we need is a critical challenge. Additional anxiety/stress could be alleviated with space/technology. (If we cannot have desktops, we would not be opposed to laptop carts.)

Our media center is still supporting a lot of Sustained Silent Reading (SSR). We have three certified media specialists in our district (Elem/MS/HS)...that side of the media center is very strong and we want to keep that moving forward, but the technology component is lacking.

COMPUTER SCIENCE/MEDIA CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

We would like the media center to be the center of the building. We still want books, with the understanding that non-fiction/research type materials are irrelevant because we have access Online and they are changing daily. We would like a presentation area as well. Currently, board meetings are held in the lobby of the PAC, but when that happens, the PAC cannot be used.

Students definitely utilize the research aspects of the media center. They use the media space for studying; it's a multi-faceted space right now. A lot of testing happens in the library. That said, we need space to be able to test while still having access to space for other purposes.

My Computer Science curriculum is predominantly focused on robotics right now. A larger space to do those types of things would be very helpful.

Computer Science (Robotics) and Programming has 2-3 classes at 20-27 students.

We could do more with additional software that we can't use on a Chromebook. Currently, I do not interact with anyone in CTE. If we could expand, that would be the best thing for the program. To drive things forward, for Computer Science and Media/Library to share a space; that would be great.

The Computer Science classroom is pretty traditional with a 'mind cave' that houses equipment and a lab. The lab is used predominantly by business.

The space is a good size so it does allow us to do a lot with robotics, but it does get loud. It's a very collaborative class.

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

We would love a shared maker space that is the center of all collaboration--tech classes can bring other disciplines together. History or math could use the 3D printers, for example. That's the beauty of computer science...interdependency. We like the idea of a centralized hub with pockets of classrooms semi-attached. A centralized approach will also allow for cross-curricular lessons. For the Media Center, I could envision now a larger centralized location, maybe over two stories. Being able to interconnectedly talk to each other...with math/science close by...I'm a big fan of it being a centralized location...being able to share resources will help everyone and break down islands. The addition of quiet rooms, with sliders, would be great. I also see strong opportunity for a broadcasting component, with a green room. Yearbook would use this space! A large collaboration/presentation stair would be great as well. The Media Center does not need a dedicated office but a small space for Yearbook/PROM or a small space to take a private phone call would be very helpful. It's very important that the furniture be mobile. It's important to have the capability to move presentations/furniture around.

FOOD SERVICE AND DINING

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Food Service and Dining

Attendees:

Kathy West, Kitchen Manager
Bowling Green High School

Tabitha Hiler-Young, Food Service Director
Bowling Green City Schools

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

DLR Group:

Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Food Service and Dining focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

There are three lunch periods at the high school. 325 students is the max student count in one lunch. B lunch is a split period. A and C lunches are typically larger than B lunch. Not every kid is ordering hot lunch but the district does have a high participation rate. Of 800 kids in the building, usually 250 get hot food.

We do serve breakfast (40 or less students). It's a grab and go or hot item. Students stay in the dining room for breakfast.

There are no after school offerings.

The high school is currently operating two lines that have reimbursable meals served. We are looking to bring in a sub bar next year which will add some congestion. We have a snack/drink bar. (The snack area is in a separate room and there are issues with theft.) The main lines do get backed up. There are two servers on each main line and one person retrieving and bringing up items. We do not have the flow on the backside that we want.

Right now, deliveries come through the back door. A receiving area would be nice. The location of our current freezer is not ideal because the sun warms the cooling coils. The kitchen manager and her staff have lockers that are filing cabinets inside of their bathroom. Not ideal. Currently, we have only female staff. We have a single, unisex bathroom. The kitchen manager does have an office space. We do not have a washer/dryer unit for the kitchen.

For healthier options and meeting government targets, it would be beneficial to have larger space, more cooling, and refrigeration for fresher products.

Currently the high school is using disposable materials and the middle school is using reusable materials that are washed. The high school would like to have reusable materials as well.

FOOD SERVICE AND DINING CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Students have a 30 minute lunch period.

Students use an ID to get their food and items from the snack bar.

In the dining area, there would be benefits to different types of seating; pod seating is not always the best at the middle school. Right now, tables are too close together and this presents issues maintaining control of kids in that area. Lines bleed into the tables.

Art teachers allow students to eat in their classrooms and there are always kids eating outside in the courtyard. At present, there is no assigned person to monitor the courtyard but the courtyard is on the interior of the building footprint and surrounding teachers do have line of sight.

Sometimes the cafeteria can be used as a hosting area.

We like to maintain visual of the students, awareness/line of sight for safety. Thinking about future plans, our initial preference would be a more closed in than open concept.

Our staff does a good job getting the kids through the line as quickly as possible, but a better design to offer more options and move kids quicker would be good, with closer adjacency to restrooms. Right now, we need more seating space all in one area and a better way of getting students in and through.

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

I like the idea of combining presentation/sitting stairs and dining. In the past, I have not liked the feeling of closed off dining. I have a better feeling at some schools when the cafeteria is opened up to the gym with potential space for concession stand and overflow seating. It would be nice to have a courtyard right off dining and a full restroom.

I like the aspect of having it open with different seating styles that allows the space to be used for academics as well. Multi-use of seating areas.

I like grab and go aspects and an open feel. I like that a food court concept breaks up the lines and congestion. I like the idea of having outdoor picnic tables and a cover as well.

A pizza conveyor belt would be a dream. Especially with how kids like to customize. We have been boosting participation by giving students opportunity to customize. We do a lot of sales at the snack bar area. Some students are vegetarian/vegan...right now we just offer a light option. The sub bar/salad station will help support this. I like the idea of food stations.

Students are making healthier choices and we want to be giving them the opportunity to do that. We want our students to succeed in whatever they are trying to do.

PERFORMING ARTS

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Performing Arts



Attendees:

Janet Fu Teacher (Orchestra)
Bowling Green High, Middle, and Elementary Schools

Jenny Metzger, Teacher (Band)
Bowling Green High School

JoBeth Gonzalez, Teacher (Drama and Public Speaking)
Bowling Green High School

Samantha Preisner, Teacher (Band)
Bowling Green High and Middle Schools

Shawn Hudson, Teacher (Orchestra)
Bowling Green High, Middle, and Elementary Schools

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal,
Bowling Green High School

DLR Group:

Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Performing Arts focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

We make a great partnership. We work together well.

The theater program is student centered, ensemble oriented, and very collaborative. Our programming needs extreme flexibility and opportunities for us to grow with technology. We do have a community performing arts center, but the day-to-day space is old, outdated, and dangerous (asbestos in existing lights). Theater programming is currently isolated. Ideally, theater would be adjacent/connected to the other performing arts. Theater studio has no adjacent small group areas. No way to divide students into small working groups.

We do have a well balanced performing arts program...band/jazz band/orch/choir...all the aspects we cover. Our current proximity, closely located to the performing arts center works well. Essentially, we have two large performing spaces, but we likely need three. Having three large group performing classrooms that are flexible is vital. Without having large group rehearsal spaces, our options for scheduling are severely limited.

PERFORMING ARTS CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Presently, we do not have adequate space to bring ALL choir students together. In order to meet before a concert, we go into the auditorium or over to a band room.

The three directors in band do a lot of team teaching. There are many times when we need additional space. In addition to large spaces, more practice room type spaces or smaller ensemble spaces are needed. For instance, a space where the jazz band (18-25 people) could leave their equipment set up to allow for more instructional time, versus set up/close down time. (Practice rooms are shared between disciplines.)

The size of the current band rooms is sufficient, but more separate spaces are needed.

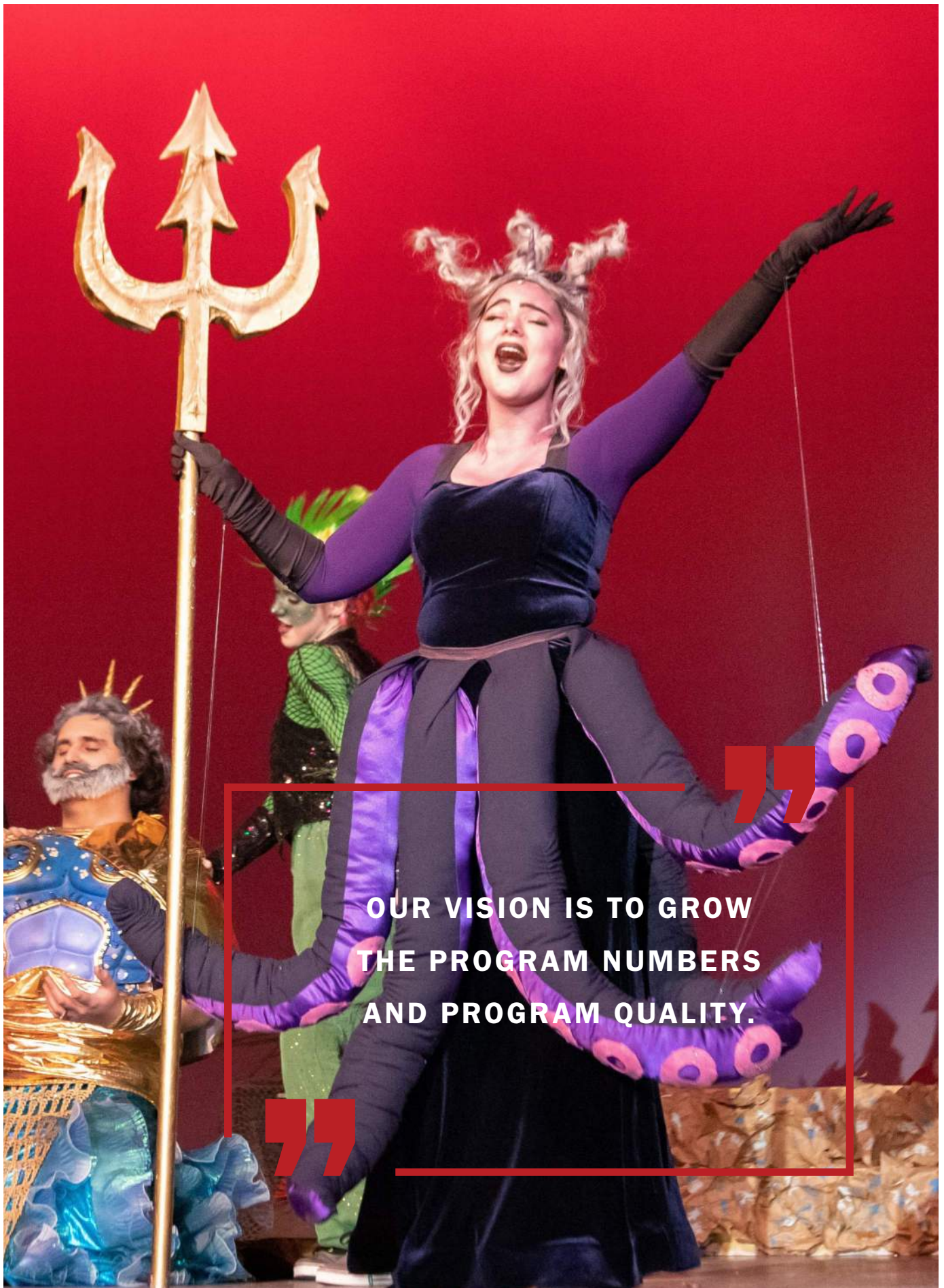
Middle school equipment/tech is sufficient at the moment but high school tech is limited. For example, it is difficult to show large videos or presentations.

We do share resources and we share spaces as well, but we do not have enough storage. This includes costume storage. Percussion storage is also needed with direct adjacency to rehearsal spaces.

Temperature control needs attention; we spend a lot of time dealing with this.

All spaces are not currently outfitted with appropriate acoustical treatment.

There is need for space to meet one-on-one privately with a student or parent. Additionally, there is no access to a conference room. Office space is limited. (Using retrofitted practice rooms.)



OUR VISION IS TO GROW
THE PROGRAM NUMBERS
AND PROGRAM QUALITY.

PERFORMING ARTS CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

We want to have sufficient square footage for enrollment today but with the ability to expand. (Current figures: orchestra (70), choir (80-125) and band (105...but as large as 200 fifteen years ago.) Our vision is to grow the program numbers and program quality.

Technology that augments what we have at performing arts center, not replicates.

A black box with seating that could be conducive to smaller performances.

Main rehearsal room that can fit a big group, an ensemble room for band/orchestra/choir, and then a larger ensemble room that could support sectionals.

Sufficient instrument and music library storage, with line of sight into storage space.

Breakout rooms with easy access for teacher presence.

Broadcast studio or black box theater...accessible to high school and middle school.

Space to support music technology or music theory classes, including a music technology lab with a recording/broadcasting area. This could include systems used for digital scene design.

Dedicated space for small instrument repair.

Dedicated space for costumes and sewing machines.

SCIENCE

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS**Subject Area: Science****Attendees:**

Daniel Black

Principal, Bowling Green High School

Beth McIntosh

Teacher (Physical Science and Biology)
Bowling Green High School

Erika Kimple

Teacher
(Principles of Human Body, Chemistry, and Biology)
Bowling Green High School

Magdalena Meszaros

Bowling Green High School Graduate

Dusty Lake, AIA, ALEP

K-12 Education Client Leader

Troy Glover

Planner

Laura Beth Cochran, AIA, NCARB

Architect

The Science focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

Speaking to the Human Body/Chemistry classroom: we currently have a ton of storage which is fantastic. This is really important because sometimes I might be running three different labs at one time...outside space away from general desk area is really nice...I have movable desks in the middle of the classroom and then I have counters around the outside.

I like when there is a separate learning area from the lab stations. I also like science all together so that we can easily jump between classrooms as we share a lot of equipment.

All of the science teachers being together is really helpful. Storage is key. Having lab stations and a lecture/work space would be really helpful and really functional. I also think that proximity to outlets is very important. We're trying to use so much technology and equipment, we need lots of outlets. Floor outlets are not preferred because stuff gets in them. All science teachers would like to have the flexibility to move students into groups and rows and back again and still able to plug in their technology without the worry of tripping.

SCIENCE CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

On average, classes don't have more than 24 students, but occasionally can be as low as 13. Twenty-four students in a chemistry lab is cluttered.

Teachers meet by department once a week in a classroom.

The existing greenhouse is newly renovated, due to a grant, and this will be the first year it will be functional. Field Biology classes use the greenhouse and courtyards. When it's warm outside, the courtyard gets used. For example, we let weeds grow through the summer and then students are asked to identify weeds at the start of the year. It's a nice addition to have, especially for field biology lessons.

We also have a land lab space on the other side of the building and the middle school teachers use all the time in the spring.

When lights work, they're good. We would like the ability to change the lights in the room and to dim. Generally speaking, classes have good natural light.

New mini-splits have helped air quality and comfort. In some classrooms, ventilation smokes when it is turned on and cannot be used.

Existing gas jets do not feel safe to use due to location.

Teachers are sharing chemical storage.

Many of the existing science classrooms are general classrooms that have been retrofitted. This means that they are too small and do not have the required equipment. Some of our 'science' classrooms do not have sinks.

Accessibility is very difficult as spaces are just too small.

Our spaces need to be flexible to teach all sciences in that space.

There is some co-teaching happening but space is a major issue. We have used the library or gone to the gym or just swapped kids in our classrooms. We want to do more of this but it's hard right now. Connected classrooms can be beneficial during similar labs/testing.

SCIENCE CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

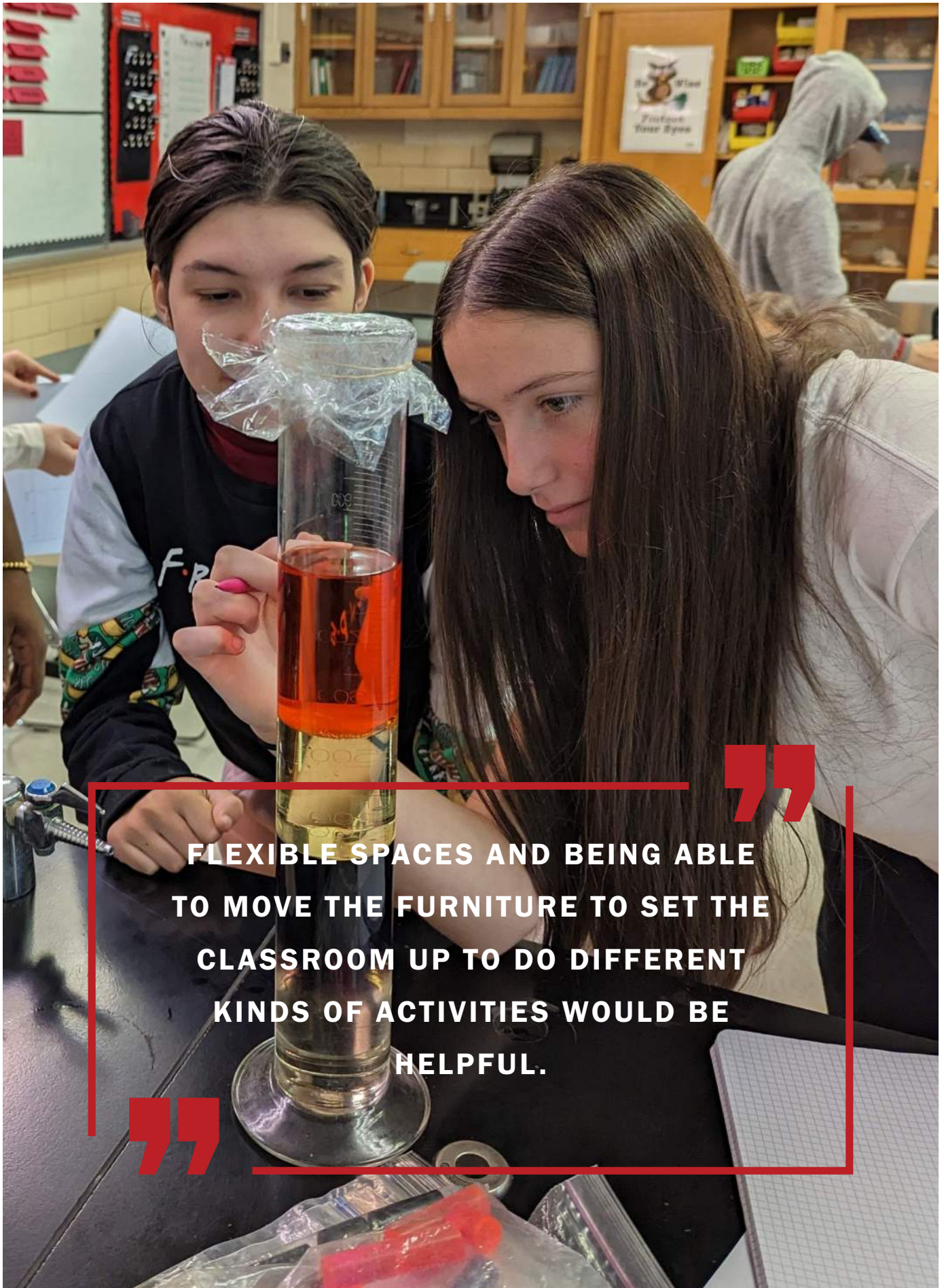
Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

Sharing space would be challenging in a block schedule setup because we all do our labs on the same long days. Every classroom needs to have personal lab space and 'classroom' space. We would hate to have new spaces and less ability to do hands on activities because of the spaces. Our preference would be to have our own spaces and not share. That said, some shared space between two teachers could be much better than what we currently have access to so we would be open to that.

Having flexibility to be able to put classes together somewhere is something that I would like to see happen. It would be hard to share a lab space every single time, but on occasion, that would be really cool, across all disciplines. Some type of commons space that could be shared would be great.

We all do our own instructional approach...some lecture/hands on/some sort of inquiry lesson or a lab...the approach changes based on teacher mood and how the kids are acting.

I would like to have a spill out space into the hallway where I could maintain line of sight. There are lots of awesome things happening in science...visual connection could help a student see what they might study next year or motivate.



**FLEXIBLE SPACES AND BEING ABLE
TO MOVE THE FURNITURE TO SET THE
CLASSROOM UP TO DO DIFFERENT
KINDS OF ACTIVITIES WOULD BE
HELPFUL.**

SPED

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS**Subject Area: SPED****Attendees:**

Anne Clark, Intervention Specialist in Learning Center
Bowling Green High School

Heather Tessler
Intervention Specialist in Learning Center
Bowling Green High School

Kayleigh Evans
Intervention Specialist in Learning Center
Bowling Green High School

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

DLR Group:
Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The SPED focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

Ballpark, we have 80 students on an IEP.

Generally speaking, our room size is great, there is a lot of space. This year, one of our challenges is that we have kiddos that need swing breaks. But our classrooms don't have the space for a swing or more sensory type items. I do have a gym mat with a curtain for 'get away' space. We are working on making a sensory room for next year, but it's right next to a wood shop. We really need a sensory room.

Upcoming, we will have students in need of space to move around and no clutter.

Natural light in our spaces is fine.

Last year, we had 2-5 students in one classroom space. Upcoming, we will have 5 all day and a couple more that will check in.

A classroom with a restroom would be amazing. Presently, we do not have a good restroom. Students use a staff restroom. Not accessible to wheelchair and/or walker. Having a shower would be nice.

SPED CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Our present location works well because there is minimal interruption to academic spaces. Students know where to find their support person all day long.

Students are dropped off or picked up after or before the 'busy' time. We are close to bus drop off because some ride the bus. We do leave a lot to go to job sites in the community. (Small parking lot close.)

For Phys Ed, we have been going to the middle school but will go to gym this year.

I teach Life Skills in my room and I push out and co-teach. I co-teach freshmen math class, algebra and biology, supporting student needs with the prime teacher/content specialist. It would be helpful to have the option of standing desks and ball chairs. In my room, I traded out individual desks for old library tables.

We also have now a foods specialist class where we will push in during that teacher's planning.

Right now, we have 3-5 Life Skills students.

Carpet as a finish material is sometimes a worry.

One of our specialists is in the English hallway right now. It's nice to be close to our relative departments but it would also be good to have all intervention specialists close to each other.

Speaking to the classroom in the English hallway: I've had as many as 15 or as few as 4 students. Generally, 10 students or less. It's a small classroom, carpeted, with very small windows and very little natural light.

We want more natural light, more windows, and flexible seating. My desks are close together; I don't have much space to be creative.

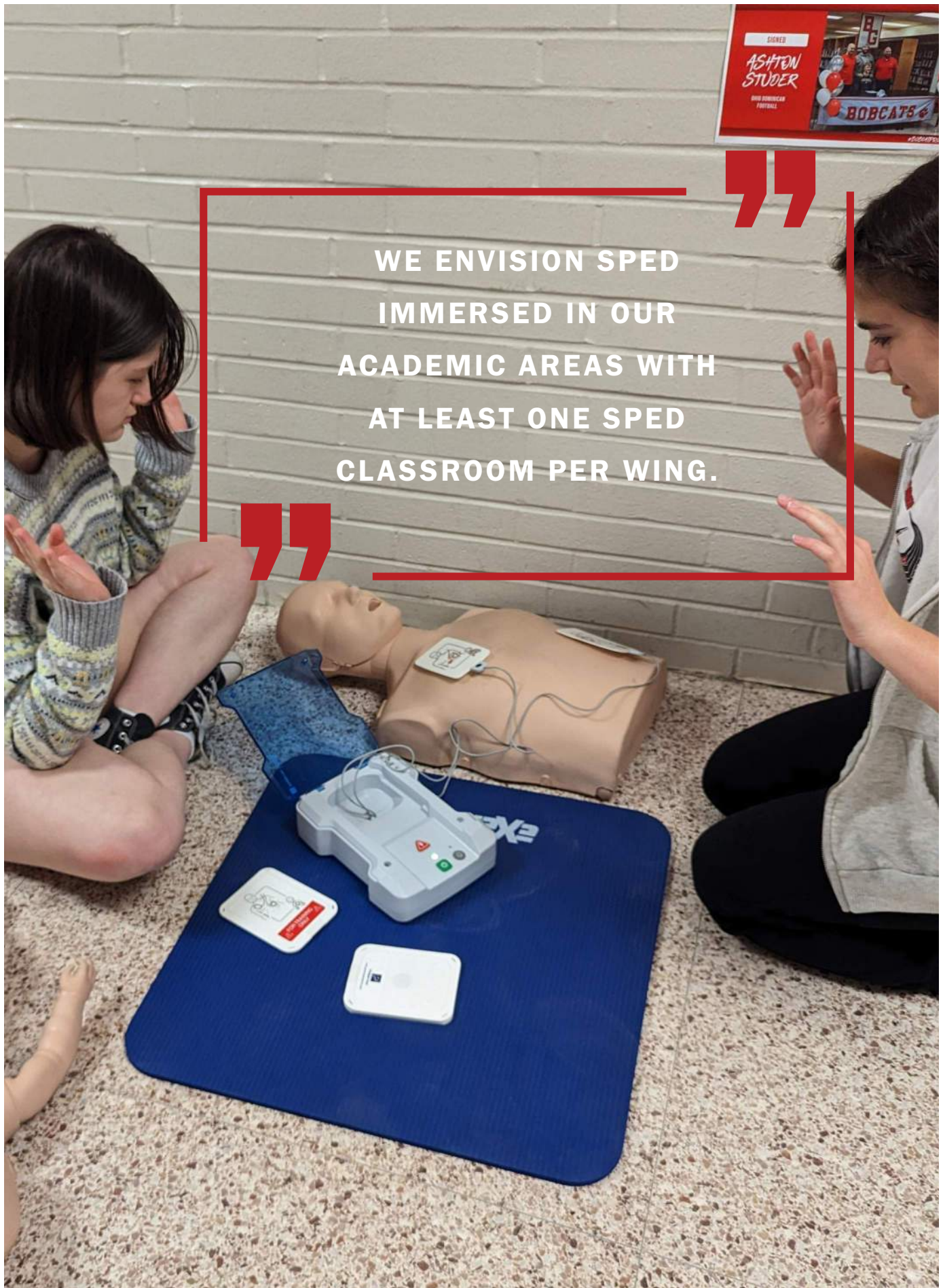
We don't need individual seating, but individual space.

It would be fun to have alternative seating for students, but not a necessity.

One self-contained room into the future seems appropriate.

We need to consider locking procedures for our classrooms.

Specialty lockers are needed for some students.



SPED CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

I do like being integrated in the general education area; it helps our students. We would like to be near core academic teachers. (First floor and close to doors/exits.)

Presently, we do not have a dedicated room to meet with parents. We use a classroom or general classroom. When all meetings are in person, it has been difficult to get a room. In general, we lack conference room space in the bldg. IEP meetings happen at least once a year but often meetings happen frequently. It would be nice to have a dedicated area next to the entry of the building for general conference room use. (Current meeting rooms have no tech.)

It would be beneficial to have a setup that would be like an apartment/kitchen area, or at a minimum at least a sink in my room to set up a coffee cart.

We envision SPED immersed in our academic areas with at least one SPED classroom per wing.

It would be awesome to have sensory corners in every classroom, so students don't have to leave the room.

We need to provide an OT/PT/Speech room for the future.

VO-AG, DECA, AND FAMILY AND CONSUMER SCIENCES BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Subject Area: Vo-Ag, DECA, and Family and Consumer Sciences



Attendees:

Cara Maxey, Teacher (Marketing Education/DECA)
Bowling Green High School

Stephanie Conway, Teacher (Agriculture)
Bowling Green High School

Magdalena Meszaros
Bowling Green High School Graduate

Daniel Black, Principal
Bowling Green High School

DLR Group:
Dusty Lake, AIA, ALEP (K-12 Education Client Leader)
Troy Glover (Planner)
Laura Beth Cochran, AIA, NCARB (Architect)

The Vo-Ag, DECA, and FCS focus group was organized to first understand existing standards and program guidelines (staffing, roles, functions, etc), room and equipment requirements, current challenges, and what is working well.

Recorded Dialogue:

Speaking to our Vo-Ag programming: I teach a 9-12 program with five courses taught throughout the day. Each course has approximately 140 standards that we cover throughout the year. Our current space is adequate for what we need to accomplish throughout all five courses.

Ag Food/Natural Resources Course: (Plants/animals/soils/leadership/woodworking competencies)

Animal/Plant Sciences Course: (Metalworking/raise chickens/plant work in greenhouse/animal science)

*Food Science Course:
(Course has adapted to facilities; we would like to improve upon this as we don't have a space to do food science labs without partnering with other teachers.)*

Mechanical Principles Class: (Shop based/small engines/metalworking/woodworking)

Ag Business Course: (Most classroom traditional course.)

VO-AG, DECA, AND FAMILY AND CONSUMER SCIENCES CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Room/Equipment Requirements:

Everything is in one location and all spaces are connected. Right now, all the things are together, right here; as a single teacher program managing 120 students, this works well. Classes get pretty full, with 25-28 students.

Presently, we do have sufficient space but we do not have all the resources that I want for our current course offerings.

Students can receive certification. What we have for industry credentials is not real strong at the moment. Right now, I sometimes work with Science teachers and sometimes with FFA/DECA and occasionally use some food science equipment to do labs.

We do arch welding/gas forging/oxy settling torch... lots of different types of metal working projects.

The current Food Sciences room is too small and lacks appropriate line of sight for student supervision.

Speaking to our Marketing/DECA programming: It is a Jr/Sr only program with 25-28 students. I teach business foundations and marketing principles to our juniors and strategic entrepreneurship/integrated marketing communications and marketing co op to our seniors. We cover approximately 140 content standards for each area.

I've adapted to the space that I've been provided and grateful to have a space. But it's not adequate. Major issues include lighting and projection.

The room itself is lovely in that there is plenty of space; we like to set it up as a business environment. We were able to get rolling chairs from PENTA, but would love the tables to move. Essentials to me would be some sort of area/outlet for students to break out into, like a meeting room, with regards to competition and opportunity for one-on-one meeting. (At competition, there are 50+ areas that kids can compete in...when kids prep during class, they need different types of spaces to practice in.)

It's Career Tech...it's not teacher centered.

Storage is an essential, with ability to bring content in and out.

I have worked in environments where there is a school store and could see that in the future. We do have a display case; it's a nice thing to have to promote the program and showcase kids.

Business education courses operate outside of career tech.

VO-AG, DECA, AND FAMILY AND CONSUMER SCIENCES CONT.

BOWLING GREEN HIGH SCHOOL FOCUS GROUPS

Additional dialogue explored what future-facing needs the program will have and what the long-term vision for its success should be.

Flexibility! Ability to shift things around as needed. And collaborative spaces and collaborative furniture. Flexibility to move furnishings to do group centered work would be beneficial. Power drop downs and resources of that nature would support flexibility too.

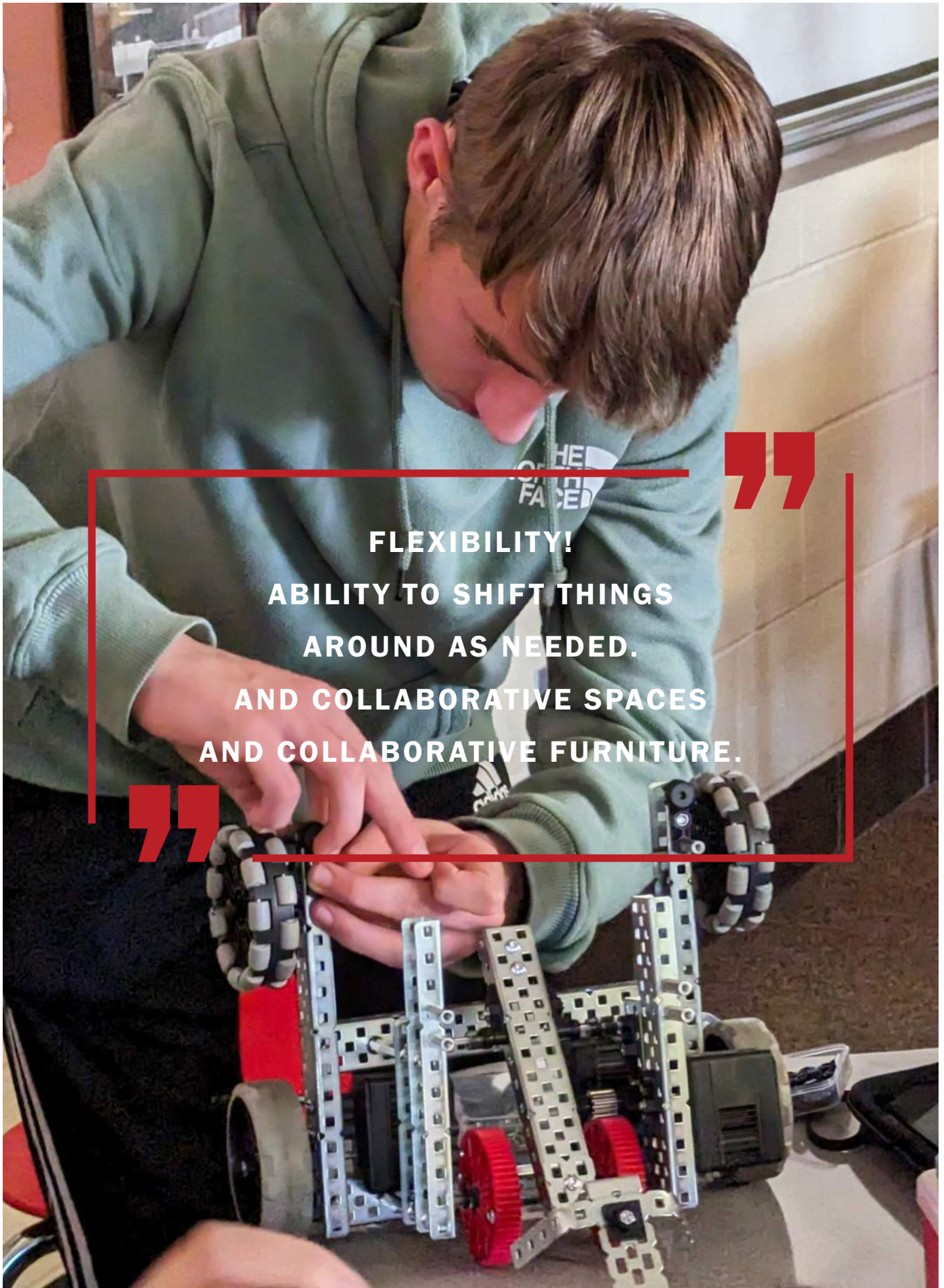
Lab space connected to a classroom would be great, with consideration for garage door access to the outside for deliveries.

It would be nice to have career tech programs in a vicinity that won't disrupt other classes.

We would like a Science lab looking space with access to ovens and more sinks. In an ideal world, our space would be more conducive to having livestock present, I would love to have that. Pens/ventilation to have animals more frequently. If I had, in a dream world, capability to have space to utilize more, I would bring in more actual animals (pigs/sheep, etc.).

Speaking to our Child Development and Global Foods programming, the separation or an additional space for teaching child development, without a foods focus environment, would be ideal. We also need to make sure that we are accommodating to the needs of any students with special needs. Space accommodations should consider area for supporting paras.

PENTA: Please note, within the last two years, PENTA invested in a new facility that's just a 25 -minute bus ride away. Current programming offerings at the high school are not anticipated to change but we can leverage the PENTA facility as a resource. The highest number of students (139 students) was sent this last year. We are not trying to push kids out of a college track but give them other options. We are working to provide a better understanding of what is available in career tech trades to our students. (Those 139 students spend all day there and get their core classes there.) PENTA is open to sophomores, juniors, and seniors. PENTA is working to explore half day opportunities for students, for instance, that want to remain in band.



**FLEXIBILITY!
ABILITY TO SHIFT THINGS
AROUND AS NEEDED.
AND COLLABORATIVE SPACES
AND COLLABORATIVE FURNITURE.**

TEACHING AND LEARNING VISIONING
BOWLING GREEN CITY SCHOOLS



Bowling Green City Schools Teaching and Learning Visioning Visioning and Design Summary

Bridging Organization Learning and Design

BOLD connects districts and designers to ensure the vision for teaching and learning is supported by the built environment.

June 12, 2023

Teaching and Learning Visioning

01 Introduction

02 Design Team

03 Teaching and Learning Visioning: Process

04 FINNS Framework

05 Aspirations and Goals

06 Workshop Summaries and Key Takeaways

07 Exit Ticket

*Please note, all photography, unless otherwise noted, was provided by Bowling Green City Schools.

Design Team

DLR Group is a global integrated design firm.

Our promise is to elevate the human experience through design.

This inspires a culture of design and fuels the work we do around the world. We are 100 percent employee-owned: every employee is literally invested in our clients’ success. At the core of our firm are interdisciplinary employee-owner teams; these teams champion true collaboration, open information sharing, shared risk and reward, value-based decision making, and proficient use of technology to elevate design.

At DLR Group, Teaching and Learning Visioning is supported by BOLD. BOLD bridges organization, learning, and design. Our team of educators has personally experienced the transformation to innovative learning environments and is here to take the uncertainty out of change, empower educators, and inspire innovation to help you elevate student outcomes.



Dr. Tim Shimp
Educational Learning Designer

Acknowledgments

DLR Group extends our appreciation to Bowling Green City Schools’ Board of Education for commissioning the Educational Facility Master Plan. We also thank district administrators, teachers, staff, community representatives, and all who assisted in the development of the plan. The following individuals participated in the visioning process.

Allie Reucher	Christi Walendzak	Francis Scruci	Kisha Nichols	Shannon Kellough
Andy Newlove	Chuck Martin	Jeff Dennis	Michel Bechstein	Dr. Ted Haselman
Angela Schaal	Dan Black	Jeff Nichols	Mike Headley	Tracy Hovest
Beth Krolak	Emily Mennitt	Jodi Anderson	Norm Geer	Zeb Kellough
Bill Ferguson	Eric Radabaugh	Katie Bacon	Rachel Phipps	

Introduction

In the summer of 2023, DLR Group was contracted by Bowling Green City Schools to facilitate an Educational Facility Master Plan and share our systems approach for visioning and change management. Early planning for the project supported engagement sessions facilitated by DLR Group Teaching and Learning Designers (Educators) with focus on exploring how the built environment can best support desired teaching and learning in Bowling Green City Schools. The sessions were strategically organized to understand how the design of the building might enhance student and teacher engagement and support their success. Workshops explored learning activities and identified desired behaviors of students and teachers now and in the future.

Teaching and Learning Visioning ensures alignment with district and/or campus initiatives and priorities and guides design decisions to ensure that impactful spaces are developed in the most cost effective and efficient way.

Emerging research shows that innovative learning environments are consistently tied to higher levels of deep learning for students, and where teachers demonstrate improved mindsets with greater clarity of purpose. When investing in new tools such as physical space, furniture, and technology, it is imperative to include and address the development of organizational expectations and procedures that sustainably support and increase the desire and capacity for changing teaching and learning behaviors.

This document is the result of a deeply collaborative Teaching and Learning Visioning process with engaged stakeholders and a passionate design team; it should be referenced throughout the duration of the project to guide design decisions and ensure that the built environment supports and elevates desired teaching and learning.

Process

Critical to successful Teaching and Learning Visioning is a process grounded in research informed and data-driven design with diverse and robust stakeholder engagement.

Research informed and data-driven.

Through extensive primary and secondary research, DLR Group has established a foundational understanding of how and when design factors have the greatest impact on student academic engagement. Learning environments that are flexible and adaptable improve students’ deep learning. Future-facing learning environments adapt and change as customizable tools that can respond to different teaching approaches and individual learner preferences. When the built environment can adapt to support the learning experience, the building itself becomes a tool.

Engaging all stakeholder voices.

The visioning process depends on an equitable approach to stakeholder engagement, with strategies and systems in place to build up voices across all levels of leadership in the district and in the community. Throughout DLR Group’s collaboration, there was a foundational understanding that Bowling Green, as a community, is student focused and committed to elevating teaching and learning for student success. The city of Bowling Green looks to the district to always push forward, to strive to be better, and to realize a future-facing vision that balances innovation, rigor, and efficiency.

The FINNS Framework

DLR Group is one of few architectural firms conducting widespread primary research. Our peer reviewed, published surveys of over 5,000 students and 1,000 teachers to date lead us to effective, data-driven design solutions that engage students.

This extensive research informed the creation of the FINNS Framework.

Flexibility
*Organizing principles
for the task
environment*

**Naturalness
and Nature**
*Organizing principles
for the natural
environment*

Individualization
*Organizing principles
for the personal
environment*

Stimulation
*Organizing principles
for the spatial
environment*



The SEI/TEI™ research shows that high student engagement is linked with a high degree of movement in both the classroom and the school overall.



Neuroscience research supports the findings, showing how movement keeps the student engaged, adds novelty, and feeds oxygen to the brain.



Environmental psychology research shows the importance of movement at multiple scales, from small movements such as “squiggling” in a chair to larger movements such as walking or standing.



Activating design research to empower learners and educators.

FINNS *Research Informed*

*What impacts student
learning progress?*

50%
*Individual student
variability*

30%
Teacher effectiveness

16%
*Physical learning
environment*

4%
Other factors

Hattie, John. "Visible learning: A synthesis of over 800 meta-analyses relating to achievement." (2008)

Nye, Barbara, Spyros Konstantopoulos, and Larry Hedges. "How large Are Teachers effects?"

Educational Evaluation and Policy Analysis 26, no. 3 (2004): 237-57

Barrett, Peter, Fay Davies, Yufan Zhang, and Lucinda Barrett. "The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis." Building and Environment 89 (2015): 118-133.

DLR Group Project: Pathfinder Kindergarten Academy (Everett, Washington)

Divergent Thinking and Research-based Design

The future of learning depends on how our schools, our educators, and our community embrace change – changes in technology, changes in workforce demands, changes in generations among staff, and changes in our mindset and beliefs of how we can best engage our learners to prepare them for an ever-evolving future state. Every organization or school district is constantly undergoing change, but the right answer or solution isn't enough to ensure that results are achieved, because ultimately changes will require different behaviors and work processes of every individual. A successful change process occurs if there's a change in mindset, which causes a change in behaviors.

Key data points related to research-based design confirms that, in conjunction with individual student variability and teacher effectiveness, the physical learning environment has a significant impact on deep student learning (this impact can be positive or negative). Well-designed, innovative learning environments can be a catalyst for change from the predominant method of teacher-directed learning to more active, experiential student-centered learning. The main purpose of student-centered learning is to create a personalized deep learning experience for every student to become more self-directed (with appropriate social and emotional development) while acquiring the skills and competencies to empower students to succeed.

Schedule of Engagement



Day 1

- Welcome and Introductions
- Day in the Life Now
- Divergent Thinking and Research-based Design
- Learning Connections
- Learning Continuum
- Day in the Life Future
- Wrap-Up



Mission, Vision, and Core Values



Bowling Green City Schools has an established Mission, Vision, and set of Core Values to serve as a north star for their school community, and to support the continuous planning and design around educational programs and facilities.

District Mission

Bowling Green City Schools is committed to high academic expectations and extracurricular opportunities in an inclusive, caring, safe, and healthy environment. We empower and support our staff to be responsive to each student through challenging and engaging curriculum. We partner with families and community to ensure student success.

Vision

Provide excellent instruction and equitable opportunities for each student.

Core Values

- | | |
|----------------|----------------|
| Accountability | Integrity |
| Compassion | Respect |
| Courage | Responsibility |
| Creativity | Service |
| Honesty | |



Aspirations and Goals

Visioning sessions begin by first recognizing every individual voice.

Following a bright welcome, participants were asked to introduce themselves, share their role in their school community, and identify, in two words, their aspirations/goals for the project (what they hoped to achieve in the visioning sessions).

Sample of Comments:

- *Learn more about the needs of the district.*
- *Direction for the district.*
- *Clear direction for what’s next.*
- *Excited to start.*
- *Future needs match goal for learning.*
- *Steps toward district master plan.*
- *Options for students with special needs.*
- *Clear plan.*
- *See what is available for students.*
- *What to do for students with special needs?*
- *Options for what fits the needs the best.*
- *What education will look like in the future and tools for the future.*
- *Hear about district needs and contribute where it makes sense.*
- *Learning from buildings’ uses.*
- *Understanding of where the district is headed.*
- *Environmental spaces for teaching and learning.*
- *Learning about districts and their needs.*
- *Dreaming about what education will look like in the future.*
- *Know more about master plan for deconstruction.*
- *Contribute to conversation based on experience.*

Recurring Themes:

A forecast for the future and direction of Bowling Green City Schools.

A desire to understand the needs of the district.

An understanding of how the master plan will support the creation of equitable experiences for all students.

A forecast and creative review of what the future of education will look like.

Day in the Life: *Now and Future*

CURRENT AND FUTURE STATE OF TEACHING AND LEARNING

An exercise in visual learning that
explores activities and space.



The Day in the Life activity allows for analysis of the current state of the teaching and learning experience. Working in small groups, participants put themselves in the shoes of a learner to literally “map” the learning activities students are engaged in throughout a typical school day.

After creating a student persona, each group utilizes learning activity cards to describe how their student goes through a day of learning at their current school. After the day is imagined in full, groups complete a bar chart illustrating the time the students would engage in different learning activities during the day.

Following review of the current teaching and learning experience, groups revisit the activity and imagine what a day in the life of a student in the future could/should be.

Day in the Life: *Now*

“What does a day in the life of a Bowling Green City Schools’ learner look like now and in the future?

Information gathered from the workshops can provide teachers and school leaders an understanding of:

- how learners with diverse needs, motivations, expectations, goals, and challenges learn in innovative learning spaces;
- how to adjust teaching and learning approaches to accommodate each student’s learning needs to achieve maximum growth as a learner; and
- strategies and tools to develop and apply differentiated instruction in their learning spaces.

The aim of the activity is to foster a deeper understanding of a student's learning journey and to identify areas for potential growth and innovation. The groups were tasked with creating a fictional student profile, outlining the various learning experiences they would encounter throughout a typical school day within their respective buildings.

Next, the groups analyzed the student's day, breaking it down into specific percentages to represent the possible time spent in different learning areas.

These areas included *collaborating, inquiring, presenting, creating, small group interactions, large group interactions, active learning, experiencing, and evaluating.*

Day in the Life: *Now* Student Profiles



Description of Day:

When thinking about their typical student, it was described that broken families is an occurrence the district sees more often, and grandparents taking on the role as parents, aunts/uncles, etc.

Activities that support active, large group, and collaboration are all present in the current day of an elementary student; with more opportunities needed to ensure time is spent experiencing, presenting, and inquiring. Current student learning experiences include field trips, melting ice, prairie, scavenger hunts, etc.

There was a feeling that if students are not able to do all of the things listed on the graph, then the school/teachers are failing them.



Riley

- Grade 3
- Math is favorite subject; writing is least favorite subject
 - Enjoys YouTube, gaming, and soccer
 - One brother, one sister, and loves school

Predominant Activities

- Active
- Large Group
- Collaborating
- Small Group

Key Highlights

- Health and Wellness
- Safety and Security
- Student Experiences
- Collaborating
- Large and Small Groups

Day in the Life: *Future* Student Profiles

Description of Day

The future of education for this 3rd grade student brings a much more balanced approach to the learning activities throughout the day. Engagement will be increased as the student has more opportunities for creativity, collaborating, and presenting. Many of the activities will occur concurrently, instead of in isolated pockets of time.

As the student moves through their day, the teachers will have additional informal methods to evaluate the student's acquisition of knowledge and skills; bringing a personalized approach to the learning and ensuring that teaching methods can respond in the moment.

FINN’s Framework: Design Application

Riley’s day prioritizes *flexibility* (FINNS principle).

This group’s future-facing vision for Riley should emphasize the need for the necessary tools, furnishings, and furniture to address the balanced array of learning activities throughout the day. With more inquiry-based learning connected to movement, this student must have spaces that are flexible, adaptable, and that can accommodate more engaging opportunities and experiences.

Riley

- Grade 3
- Math is favorite subject; writing is least favorite subject
 - Enjoys YouTube, gaming, and soccer
 - One brother, one sister, and loves school

Predominant Activities

- | | |
|--|---|
|  Creating |  Collaborating |
|  Presenting |  Small Group |
|  Evaluating |  Inquiring |
|  Active |  Experiencing |
|  Large Group | |

Key Highlights

- Health and Wellness
- Safety and Security
- Social interaction
- Personalization / Experiencing
- Discovery

Day in the Life: *Now* Student Profiles



Description of Day:

Coming from a very supportive and blended family, the middle school student spends a good portion of the day in whole/large group activities, and has opportunities to collaborate with peers, as well as create and imagine both independently and in small groups.

Small portions of the student’s day involve presenting, evaluating, inquiring, and/or experiencing. The student has opportunities to be active both during the day, and throughout extra-curricular activities.






Antonio

Grade 7

- The student has an IEP and enjoys Language Arts
- Math is least favorite subject
- Spends time playing sports and video games, and using social media platforms

Predominant Activities

-  Collaborating
-  Large Group
-  Small Group

Key Highlights

Health and Wellness
Safety and Security
Whole Group
Collaboration
Active

Day in the Life: *Future* Student Profiles

Description of Day

The middle school experience in the future will bring still focus on the interactions with peers in both small and large group settings, however through intentional/purposeful collaboration, students will spend a large portion of their time in activities that require inquiry and creating. Providing experiences that require inquiry-based approaches (discovery, investigation, etc.) will promote a student-centered environment with deeper learning and engagement.

There is still a focus on social and emotional development, as well as the importance of exploration as middle school students pursue existing passions and new interests.

FINN’s Framework: Design Application

Antonio’s day prioritizes *stimulation* (FINNS principle).

This group’s future-facing vision for Antonio is focused on the design of a day that includes the values of collaboration, creativity, and critical thinking. Creativity and critical thinking can be supported by the surrounding environment, including visual stimulation such as views, colors, shapes, and patterns, as well as the interaction with peers and opportunities for discovery and inquiry across inside/outdoor learning environments

Antonio

Grade 7

- The student has an IEP and enjoys Language Arts
- Math is least favorite subject
- Spends time playing sports and video games, and using social media platforms

Predominant Activities

 Creating	 Collaborating
 Presenting	 Small Group
 Evaluating	 Inquiring
 Active	 Experiencing
 Large Group	 Other

Key Highlights

Technology
Emotional Safety and Security
Collaboration
Choice
Discovery; Wonder inspires learning.

Day in the Life: *Now* Student Profiles



Description of Day:

This high school student has two working parents and a couple of siblings and intends on going to college but is considering other options as well.

Half of this student’s high school experience is in a large group environment. There exist opportunities for collaboration and working with peers in small groups, however very little (or zero) time is spent creating, presenting, inquiring, and/or experiencing. This equates to a very traditional high school experience of this 10th grade student.



Anita Summer

- Grade 10
- The student enjoys Computer Science and Art, with Math and English as least favorite subjects
 - Time is spent listening to music, gaming, playing sports, and enjoying friends

Predominant Activities

- Collaborating
- Large Group
- Small Group

Key Highlights

- Health and Wellness
- Safety and Security
- Large Group
- Collaborating
- Traditional Learning

Day in the Life: *Future* Student Profiles

Description of Day

The high school experience in the future becomes a very student-driven environment, where learning activities build student curiosity, personalize the daily experience, and supports the mindset that knowledge is not an entity to be transmitted from the educator to the learner.

Through significant increases in inquiry-based learning in small groups and through collaborating/problem-solving with their peers, students will be more active throughout the day (physically and mentally), and be expected to demonstrate their mastery of learning through new, creative, and engaging experiences.

FINN’s Framework: Design Application

Anita Summer’s day prioritizes *individualization* (FINNS principle).

This student's day is very student-centered and must connect to the physical environment with the support of ergonomics (of school infrastructure), access to wet lab/sinks, flexible furniture, and independent workspaces, Anita Summer will want to personalize their environment and express themselves within it.

Anita Summer

Grade 10

- The student enjoys Computer Science and Art, with Math and English least favorite subjects
- Time is spent listening to music, gaming, playing sports, and enjoying friends

Predominant Activities

- | | |
|---|---|
|  Creating |  Collaborating |
|  Presenting |  Small Group |
|  Active |  Inquiring |

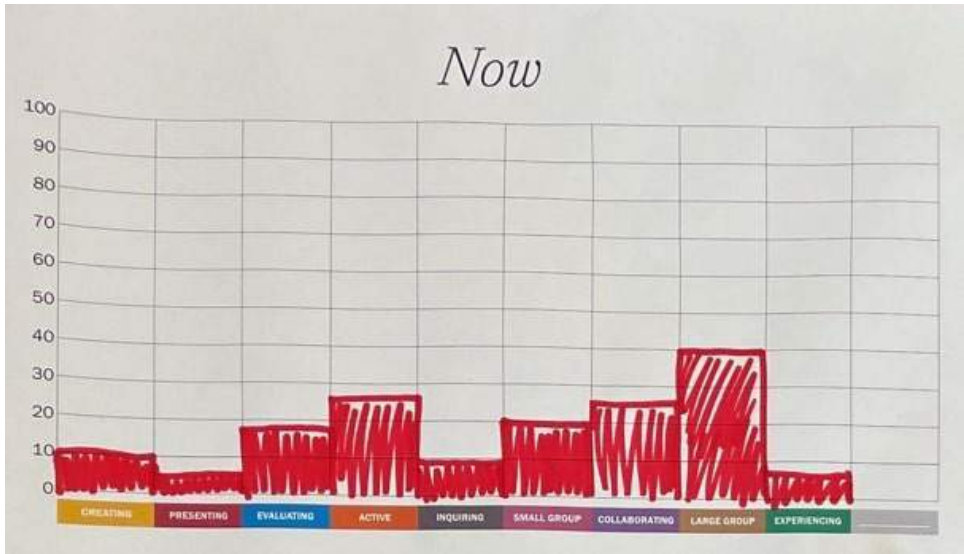
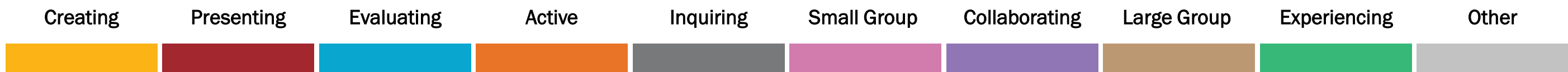
Key Highlights

Health and Wellness
Student-centered
Collaboration
Inquiry-based
Mentally/physically active

Day in the Life: Now

Student Profiles

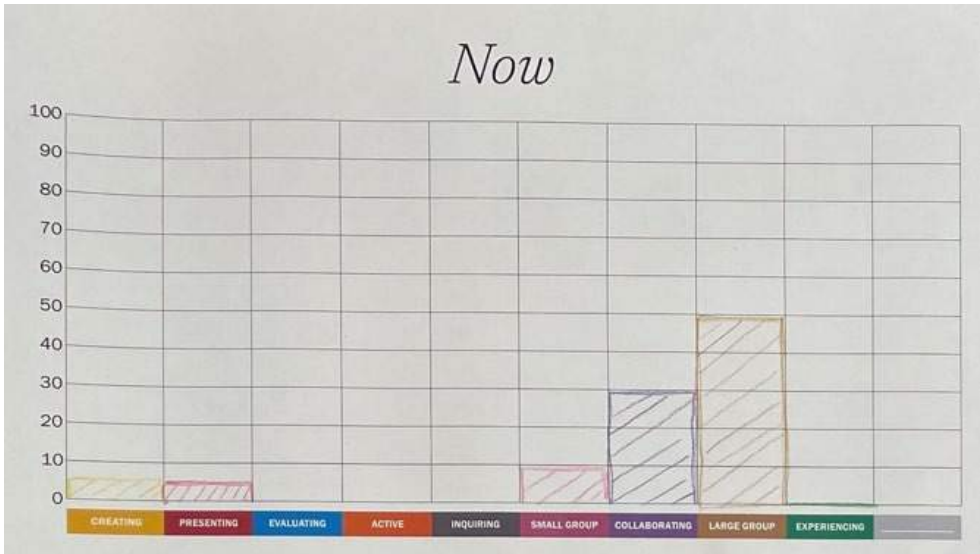
Comparative Summary of Results



Riley
Grade 3



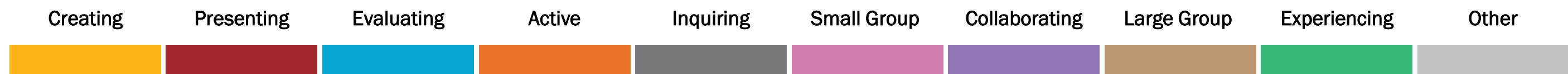
Antonio
Grade 7



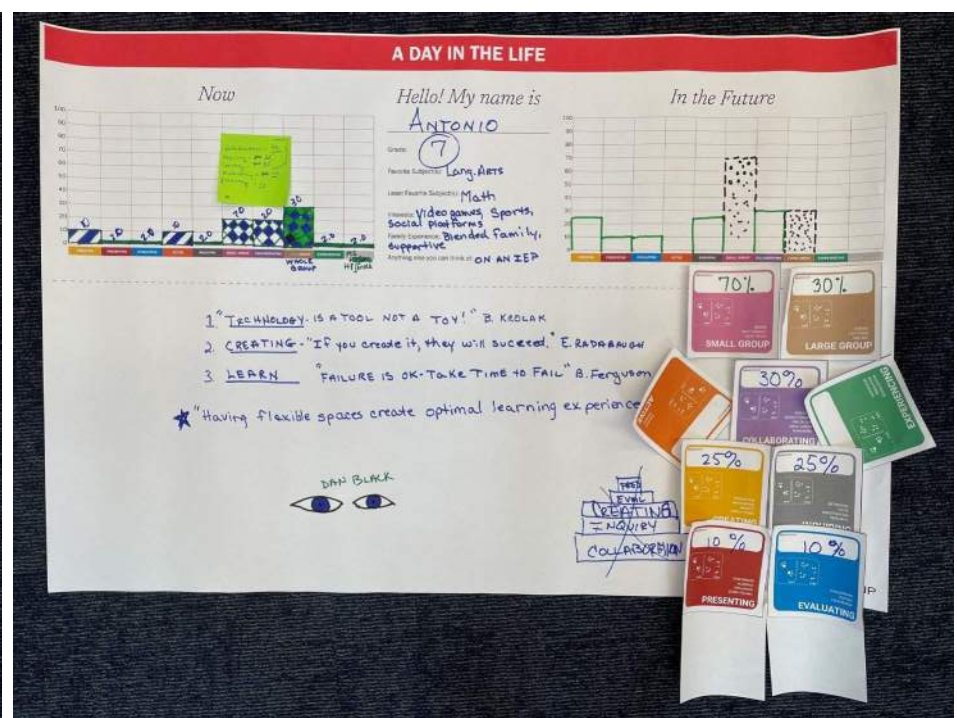
Anita Summer
Grade 10

Day in the Life: *Future* Student Profiles

Comparative Summary of Results



Riley
Grade 3



Antonio
Grade 7



Anita Summer
Grade 10

Day in the Life

Key-Takeaways *Now and Future*

NOW

Observation: Teaching and learning experiences

- Across all grade level spans, and certainly a theme as students move toward the secondary level, large group instruction is currently a common and traditional teacher delivery method, and how most students experience a good portion of their days.
- Even though students are often in large group settings and have opportunities to break off into small groups, there was consistency across all grades that many types of teaching and learning occurs to support all students. Good teaching is still happening for Bowling Green City Schools’ students.

Observation: Facility limitations to support teaching and learning

- Each of the teams expressed that there are experiences and learning activities that the teachers would like to do but the buildings/facilities are limiting the opportunities; lack of flexibility with space, traditional classrooms and furniture, limited common space access and/or outdoor learning areas.

FUTURE

Observation: Curriculum/teaching strategies aligned with staff development

- To ensure alignment, consistency, and to support best practice teaching and learning, there is a need to reestablish/rebuild an instructional model for the entire district; a guide for teaching and learning that will drive professional development, programming, school improvement, and the future planning of space and facility usage.
- As the participants worked through what the future looks like in Bowling Green City Schools, it was evident that large group instruction percentages decreased and there was an expressed desire for more co-sharing and teaming of groups across curricular areas. This would support greater inquiry, collaboration, small group activities, and learning activities that allow for experiencing and real-world relevancy.
- For successful change and the implementation of new teaching and learning strategies, staff must be adequately trained with instructional tools and the effective use of spaces.

Observation: Community partnerships and community-based schools

- Community members desire to have a bigger presence in the school buildings; after hours use, mentorship, pathways, etc.

“Flexible spaces and being able to move the furniture to set the classroom up to do different kinds of activities would be helpful.”

Educational Facility Master Plan: Science Focus Group
Bowling Green High School

Day in the Life



Learning Connections

TEACHING AND LEARNING DEFINE SPACE

An exercise exploring the connection between teaching and learning and the built environment.

The Learning Connections activity utilizes descriptive cards to explore different elements of the learning environment and how they can support desired teaching and learning.

To begin, a set of cards describing several types of learning are given to participants working in small groups. Assuming a future-ready approach, when space constraints are no longer an issue, each group selects one card describing the type of desired learning. Participants then review and select a card describing the teaching that best supports the learning they chose. Lastly, the groups select cards describing the spaces, furniture, technology, and safety and security needed to support their selected teaching and learning cards.



How can teaching and learning define space?

Learning

What type of learning do you want to see?



Spaces

What spaces are required to support desired teaching and learning?



Technology

What technology will support and elevate desired teaching and learning?



Teaching

What type of teaching do we need to support desired learning?



Furniture

What furniture and fixtures are needed in the identified spaces to support desired teaching and learning?



Safety and Security

What approach creates a safe, equitable environment for the whole school community?





Learning Connections Results and Recurring Selections

Inquiry-based Teaching

A dynamic form of active learning that begins with inquiry, problems, or scenarios. Learners then identify, investigate, and research issues and respond to challenges or complex problems.

Flexible/Adaptable Furniture Types

Furniture that is easily moved to form different groupings, offers different heights, and fuels creativity.

Interactive Technology Devices

Instructional technology that allows for greater interactivity such as interactive white boards, mobile devices, educational apps, clickers.

Spaces that can be Easily Adapted/Changed

Walls that can be modified/moved to create different sizes or configurations of learning environments.

Social Group Connections

Creating smaller social groups within the larger school environment to foster a sense of belonging and community.

Large Group Spaces

Large learning areas that will encompass a minimum of a full class size.

Learning	Teaching	Spaces	Furniture	Technology	Safety and Security
Whole Group	Facilitation	Adapted/Changed Large Group Co-teaching/Small Group	Flexible	Interactive	Social Group Connections
Constructivist	Inquiry-based	Adapted/Changed Large Group Creative Work/Maker Spaces	Flexible	Interactive	Social Group Connections
Visible	Inquiry-based	Adapted/Changed Small Group Presentation Spaces	Flexible	Interactive	Social Group Connections

Learning Connections

Key Takeaways and Priorities

Learning

Visible: Students understand their tasks, show their thinking and creating process, and reflect on their learning. Students take responsibility to construct their own knowledge, build upon experiences, and incorporate new information into pre-existing knowledge

Teaching

Inquiry-based: Students learn through a process of inquiry, problems, or scenarios, and then identify , investigate, and research issues and respond to challenges or complex problems.

Spaces

Adapted/Changed: Spaces that can be modified/moved to create different sizes or configurations or learning environments. This allows for in-the-moment learning opportunities and increases creativity and flexibility across grade levels.

Furniture

Flexible: An overwhelming desire to have furniture that is easily moved to form different groupings (small groups was also a consistent theme), offers different heights to accommodate all types of learners, and that fosters individual creativity and learning needs.

Technology

Interactive: To support greater interactivity with tools such as white boards, mobile devices, AI/VR, educational apps, etc.

Safety and Security

Social Group Connections: Having environments where small groups of students can occur to foster a greater sense of belonging and community; positively impacting health and wellness.

Learning Connections

Key Takeaways

Additional Insights/Recurring Themes:

Upon completion of the Learning Connections activity, the groups shared and told the story of the new learning opportunity, and why they made the choices for each of the selections.

With space and the actual building removed as a barrier, the teaching and learning activities became more student-centered, inquiry-based, and provided more options and creativity. It is evident that the buildings are limiting the teachers from being as effective as they could be and limiting the students from being more exploratory in their learning.

The Learning Connections activity inspired a vision for the future in Bowling Green City Schools by prioritizing learning aspirations and then defining the teaching, spaces, furniture, technology, and safety and security needed to support it.



“Flexibility! Ability to shift things around as needed. And collaborative spaces and collaborative furniture.”

Educational Facility Master Plan: Vo-Ag Focus Group
Bowling Green High School

Learning Connections



Learning Continuum

WHERE DOES THE DISTRICT WANT TO GO?

An activity reflecting on where the district is now and where they want to go in the future?

The Learning Continuum activity asks participants to define a vision for the future of Bowling Green City Schools by leveraging their own knowledge and ideas, and the research behind space and design.

To begin, each participant is given two colors of dots and is asked to place those dots on a continuum with opposite extremes; for example, static furniture vs. flexible and adaptable furniture.

Red: Where the district is NOW.
Green: The desired FUTURE for district.

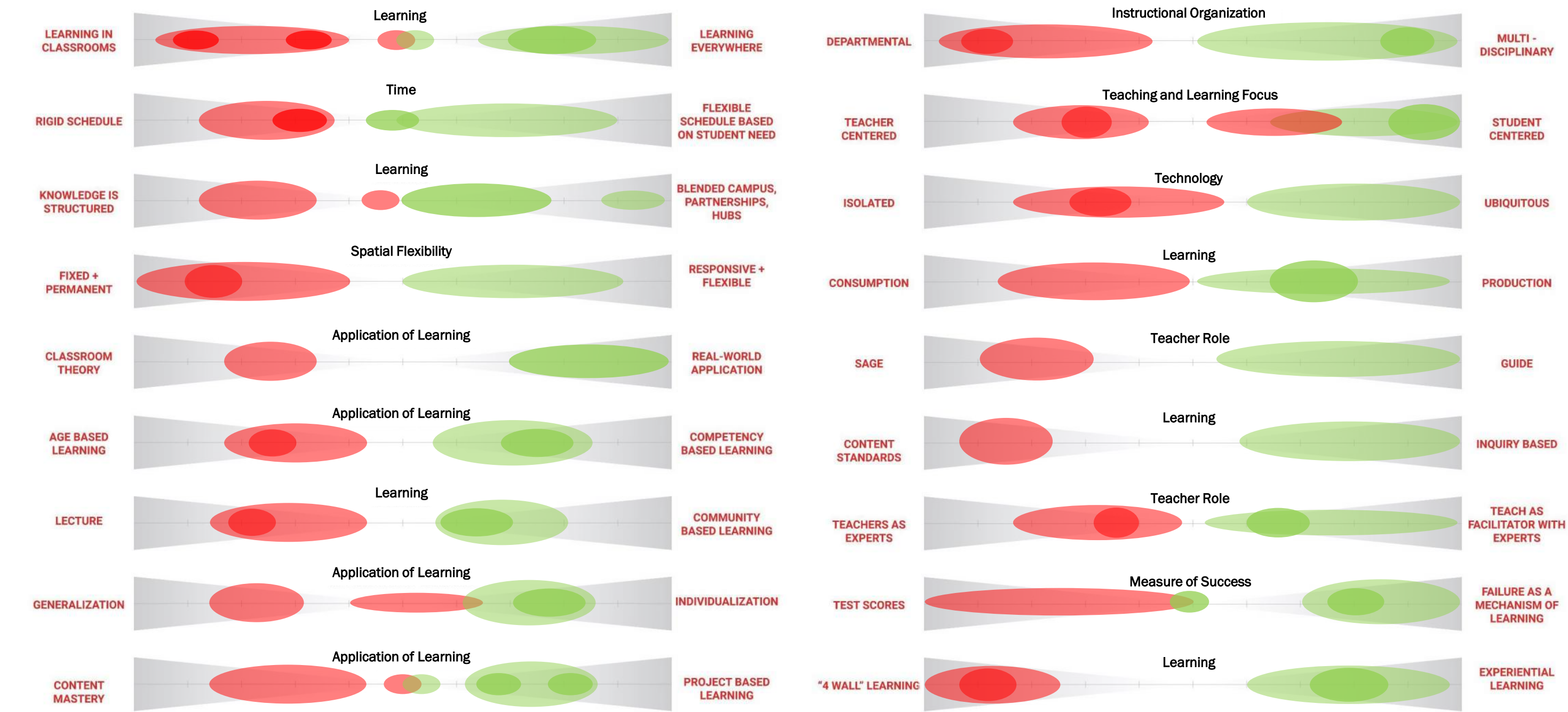
The activity explores the spectrum of learning spaces within the district, to clearly identify future aspirations for teaching and learning in the district.



“ Our vision is to grow the program numbers and program quality.

Educational Facility Master Plan: Performing Arts Focus Group
Bowling Green High School

Learning Continuum



Learning Continuum

Key Takeaways

Additional Insights/Recurring Themes:

Following the activity, group dialogue detailed a forward-looking vision for the district that prioritizes open spaces and the opportunities they can present for more dynamic, collaborative, and creative learning experiences.

The most dynamic differences between a now and future frame of thinking were present between the following comparisons:

Learning in Classrooms and Learning Everywhere
4 Wall Learning and Experiential Learning

This discussion highlighted the team’s commitment to moving beyond traditional boundaries and embracing innovative approaches to learning space design.



TEACHING AND LEARNING VISIONING
BOWLING GREEN CITY SCHOOLS

Exit Ticket

CAPTURING PERCEPTIONS AND WONDERS

A closing activity to gauge the group’s frame of thinking following the day’s events.

To conclude the workshop, participants were asked to answer two questions. The questions were:

What are three things the Educational Facility Master Plan must consider to improve Bowling Green City Schools?

What are two things that you will stop doing now?

Any additional questions?



Exit Ticket Responses

What are three things the Educational Facility Master Plan must consider to improve Bowling Green City Schools?

- Creative learning spaces/student focus, inquiry based
- Community use of facilities and support
- Flexibility of building and spaces
- Future use of buildings, long term vision, siting high school so that it could be added on to easily
- Collaboration space for students and teachers
- Spaces/environment that supports learning for diverse learners /equitable learning
- Elementary School(s) plan/solution
- Community wants to know what the full plan is/support
- School safety
- Modernized technology
- Maximize resources with facilities
- Sustainability
- Considerations for keeping part of existing high school
- High school needs to be focal point for community
- Enrollment
- Plan reflects BGCS values
- Ability to adapt as needed - EFMP outlines needs and options
- Instructional practices
- Restoring pride in the schools
- Teacher comfort and spaces for them
- Partnerships with BGSU, Abbott and other local businesses
- Demographics of the BGCS community to define what they will and will not want
- Storage, MEP, and building support space considerations
- Incorporation of spaces for special education - sensory, de-escalation

Exit Ticket Responses

What are two things that you will stop doing now?

- Teacher led instruction and traditional spaces (9)
- Lack of student work promotion and showcasing successes of schools - stop keeping good news to ourselves (3)
- Continually planning and no action / starting over every year (3)
- Inequitable distribution of resources (2)
- "It's good enough" mindset (2)
- Complaining and making excuses without providing solutions to move forward (2)
- Focus only being on HS (2)
- Looking backwards
- Focusing on the negative
- Lack of "extra space" for collaboration and conferences
- Stop building walls with the community (build bridges)
- Making decisions without a current needs assessment
- Instructional spaces not matching instructional needs
- Silos
- Blaming community for failures
- Thinking we can't build both due to cost
- "See shiny object, must have" mentality and allowing it

Any additional questions?

- Will the HS plan allow an eventual same site ES at some point in the future?
- How long does the entire process take?
- How do we communicate that teaching and learning has vastly changed? (9)
- How can we best address safety for students and staff in our buildings?
- How will we support teachers and students as we transition our learning spaces?
- What is the ES plan? How can we make them better now? (2)
- How can we collaborate more with BGSU and the College of Education?
- Will the master plan cover the entire district?
- Will there be 3D renderings of the proposed facility?
- How will we plan to sustain the facility and items needed to support the vision?



Bowling Green City Schools Teaching and Learning Visioning

Visioning and Design Summary

Bridging Organization Learning and Design

BOLD connects districts and designers to ensure the vision for teaching and learning is supported by the built environment.

June 12, 2023



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VALUES Workshop

What is VALUES?

VALUES stands for Viewing Architecture through the Lens of User Experience and Sustainability. This approach focuses on how sustainable design solutions impact the way users interact with and experience their surroundings.

A VALUES workshop is an important planning and project visioning session used to establish sustainability and wellness goals, while also taking into consideration planning- and project- specific challenges and resources. VALUES helps the project team and stakeholders identify top project goals, determine how success of these goals will be measured, and create a values-based road map for project decision-making.

What activities were included?

Through an in-person workshop, attendees participated in the following activities, which were framed by a series of educational topics related to resource conservation, human health, ecology, and community health:

- 1. VALUES Prioritization** – participants went through a series of user experience and sustainability-related themes and design directions to identify top goals for the district.
- 2. Report, Observe, Measure** – for each of their top goals selected, participants then identified what they would report, observe, and measure if the project succeeded in implementing that goal.
- 3. Headline Exercise** – participants created headlines describing their ideal future for the school district, its building, and the community.

Who participated?

Key stakeholders were invited to a workshop to investigate these topics. Stakeholders included the following groups:



BGCSD STAFF

Individuals who work in the district including leadership, department heads, curriculum and instruction leads, and technology personnel.

Francis Scruci	Kisha Nichols
Dan Black	Christie Walendzak
Katie Bacon	Beth Krolak
Michel Bechstein	Jodi Anderson
Mike Headley	Zeb Kellough
Eric Radabaugh	Shannon Kellough
Dawn Dazel	Emily Mennitt
Bill Ferguson	Allie Reucher
Jeff Nichols	Angela Schaal



FACILITIES MANAGEMENT

Individuals who are responsible for the maintenance and operation of the building.

Chuck Martin



SCHOOL BOARD AND COMMUNITY

Individuals representing the school district and members of the surrounding community who are vested in the success of the district.

Tracy Hovest
Norm Greer
Andy Newlove
Rachel Phipps
Jeff Dennis

Sustainability Topics

What is sustainability?

Sustainability is centered around the core idea of meeting current needs while preserving the ability of future generations to do the same.

It goes beyond ecological health and resource conservation to incorporate human health and community health; sustainability cannot be achieved without ecological, social, and economic balance. The VALUES exercise is organized into twelve themes that address this holistic definition of sustainability.



ACCESS + MOBILITY

Encompasses transit-oriented design, providing transportation options, decarbonizing transportation, and improving walkability and safety.



EQUITABLE DEVELOPMENT

A project can ignite change in communities by providing equitable access to programs, resources, and opportunities, promoting affordability, and advocating for those in need.



OUTDOOR ENVIRONMENTAL QUALITY

Projects can use their outdoor spaces to restore ecology, build community, and create a strong sense of place.



COMMUNITY CONNECTOR

A project can support its community by providing public resources and programs, encouraging neighborhood vitality, forging partnerships, and involving the public in decision-making processes.



HEALTH + WELL- BEING

A project's design can promote mental, physical, and emotional well-being and support users in accomplishing their personal goals.



PROCUREMENT + OPERATIONS

Projects can establish practices that support safety and security, efficient operations, and responsible procurement and disposal.



CULTURE + IDENTITY

A project can use design to celebrate its history and context and develop a strong sense of place that speaks to the identities of occupants and surrounding communities.



INDOOR ENVIRONMENTAL QUALITY

Acoustic comfort, air quality, thermal comfort, and visual comfort support occupant health and well-being, cognitive function, and performance.



RESILIENCY

Intentional design can support the ability of buildings, sites, individuals, and communities to respond to, withstand, and recover from stressful or adverse situations.



ENERGY

Generating renewable energy, reducing energy consumption and cost, modeling how a proposed building design will perform in the future, and intentionally selecting building systems.



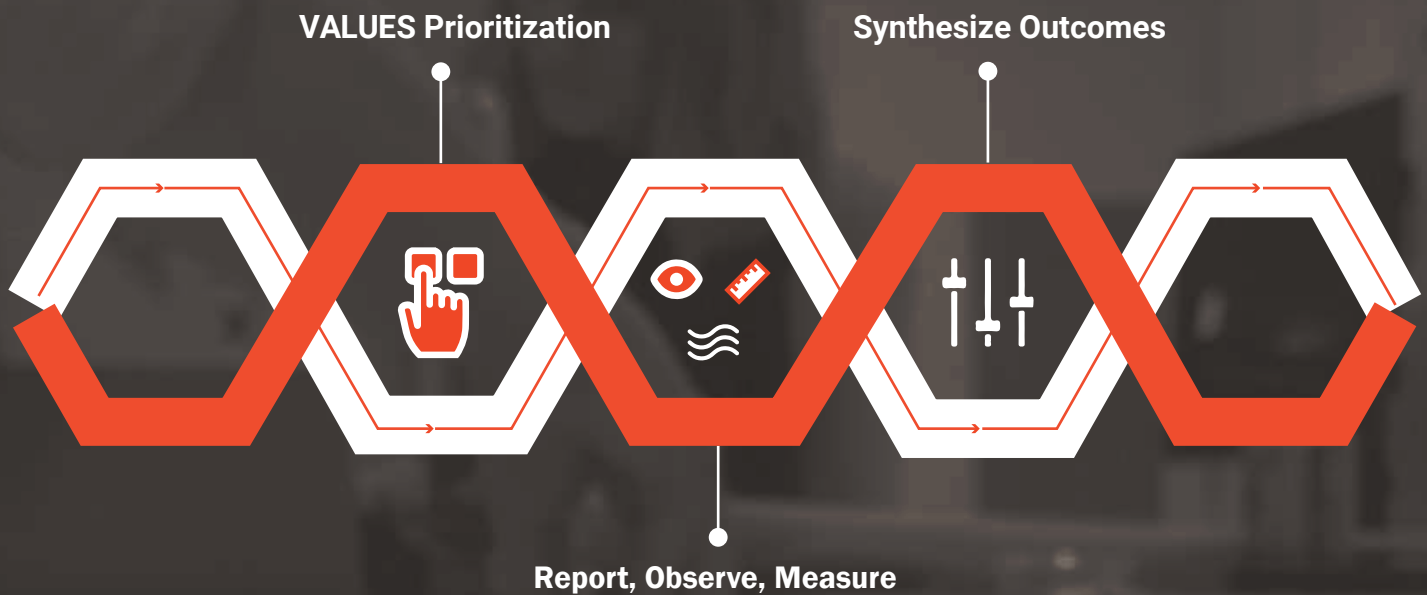
MATERIALS IMPACT

Building materials impact human well-being, carbon consumption (both embodied and operational), and cost over the course of their lifetimes.



WATER

Water encompasses water quality, water and stormwater management practices, hydrological balance, and water's cultural context in a community.



PROCESS

The following pages describe the process used to facilitate the workshop, guide participants through prioritization and visioning, synthesize results, and develop goals and next steps.

Activity 1

VALUES Prioritization

How did stakeholders select a common set of values?

Following education about the topics included in the VALUES deck, participants, working in smaller groups of approximately 6, were asked to look through and prioritize a set of 62 sustainability-related cards that fell into 12 key themes.

Facilitators aided in the discussions of each group and helped to narrow down the cards most important to their groups. Their process followed the steps below:



Activity 1

VALUES Prioritization

Participant groups sorting through the VALUES card deck to prioritize themes.



Group 1



Group 2



Group 3



Group 4

Activity 2

Report, Observe, Measure

Why triangulate data points around a common topic?

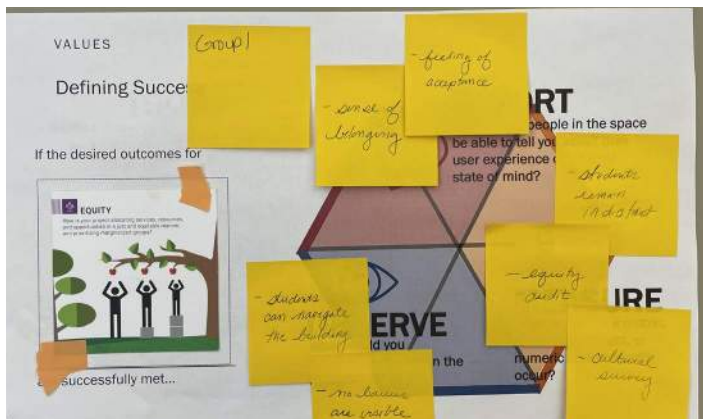
Triangulation provides a holistic approach to measuring success that incorporates multiple aspects of a goal for deeper understanding.

The Report, Observe, Measure exercise helps participants think “around” a topic to establish a zone of success for their goals, ensuring that we have multiple types of measurement and a clearer path to navigating success.

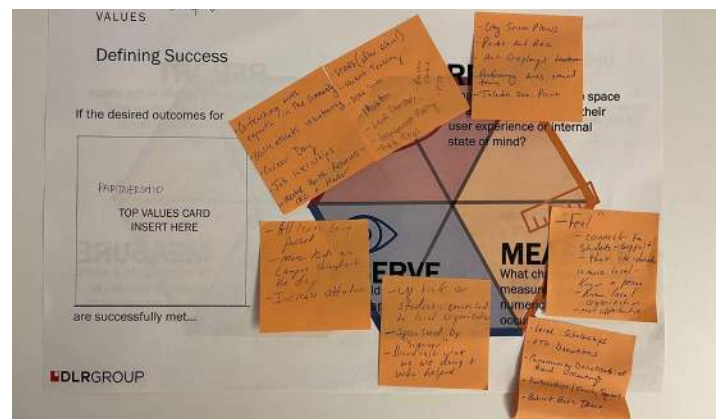
Oftentimes, things that can be measured with numbers – or quantitative data - tend to be over-represented, while qualitative experiences and human emotions get less attention or are undervalued as data points. By asking participants to think of things they can feel and express to others, measure in numbers, and observe other people doing as behaviors, this framework provides a well-rounded way of measuring success and a more equal way of valuing all aspects of user experience and user outcomes.

How did participants use this framework?

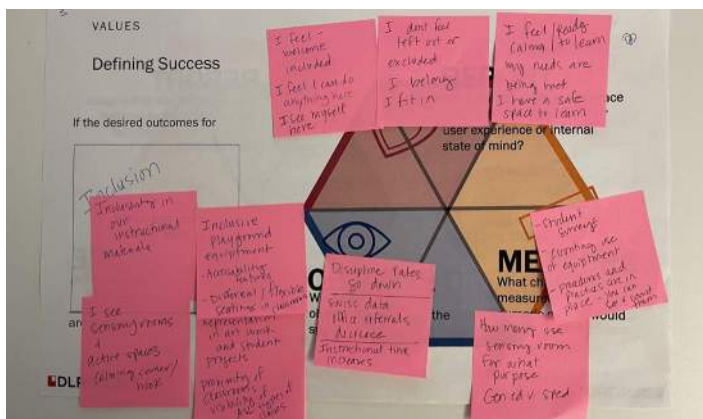
For each of the top themes selected during VALUES prioritization, participants brainstormed what they would report, observe, and measure if that theme was achieved. Refer to the Appendix for group top themes.



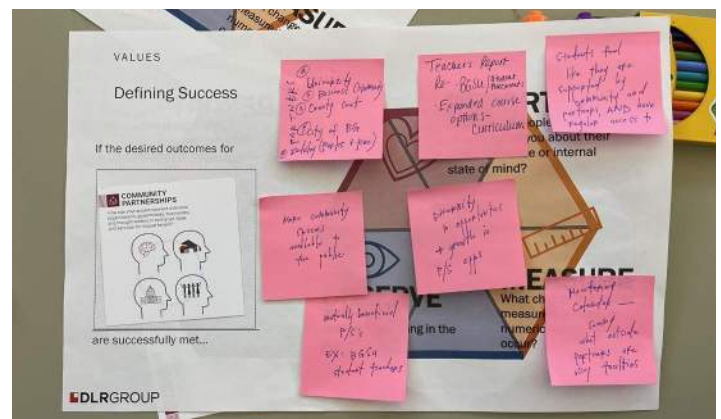
Group 1



Group 2



Group 3



Group 4

Headline Exercise

What is the Headline exercise?

Participants created headlines describing their ideal future for the school district, its building, and its community.

Participants were asked to imagine a future in which the school district had accomplished its sustainability aspirations. Working in their groups, participants created a “headline” for the project, along with supporting stories and imagery, that described their ideal future in 20 years.

KEY QUESTION

Think 20 years into the future. If the Bowling Green City School District and its building succeed in accomplishing its goals, what does that future look like?

“*Bowling Green City School Students Turn Vision into Reality*”

“*Bowling Green Schools Continue to be a Showcase of Solutions*”

“*Bowling Green Schools Top in Ohio*”

“*Community Growth Spurs Plans for Second High School and Campus Expansion*”

Synthesizing Outcomes

How were top themes identified?

Following the workshop, DLR Group reviewed the prioritized cards across each group to understand how they compared. If at least 2 of the 4 groups picked a certain card, it was considered a top theme. When groups used different cards to express similar or related ideas, DLR Group combined these into a single theme.

How were goals, metrics, and KPIs developed?

DLR Group consolidated the VALUES card prioritization, comments, and Report, Observe and Measure results to develop goals, measurements, and next steps related to each top theme.

GOALS

Goals were established by cross-referencing comments provided by each group about why they chose a certain theme with ideas from Report, Observe, and Measure that described desired outcomes. Common ideas across groups were combined into a set of goals.

METRICS

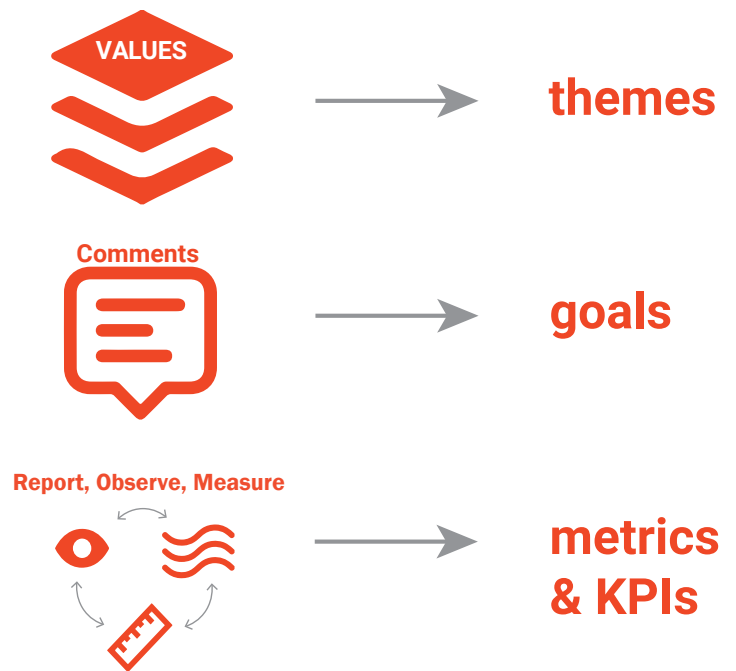
Ideas from Report, Observe, and Measure were consolidated into a set of metrics that can be used to measure progress towards each goal.

KPIs

Targets established from each goal will be used to create a pathway for BGCS D.

NEXT STEPS

The goals identified in this VALUES workshop inform the Facility Master Plan as a comprehensive set of standards establishing priorities and goals set forth by Bowling Green City School District to guide future school design.



OUTCOMES

This section reviews the key themes, goals, and KPIs identified through the VALUES exercise. Establishing clear goals, a way to measure these goals, and targets that indicate success is key to achieving desired project outcomes. The following pages serve as a road map to guide project decision-making.

Below are key terms that will be referenced throughout the section:

THEME – a common thread or idea that should be carried throughout the project.

GOAL – a desired outcome that can realize a theme.

METRIC – a way of measuring progress towards achieving a goal.

KEY PERFORMANCE INDICATOR (KPI) – a target value for a metric that can more clearly define a goal. We will know a goal is achieved when a KPI is reached.

Outcomes

Top VALUES Themes

What are the key themes?

While groups chose different cards or interpreted cards in different ways, they often expressed similar goals and values. The following key themes arose across groups in the workshop and can be used to guide project decisions going forward. The information that follows outline each priority, the cards chosen within it, and the goals that support it.



AMPLIFY COMMUNITY ACCESS & PARTNERSHIPS

Community support and partnerships will amplify student success. Partnerships should offer comprehensive education opportunities that meet community needs and provide students opportunities around future careers. The school buildings should be made more accessible for community use.



ENERGY REDUCTION

How can the selection of major building systems, overall building maintenance, and spatial comfort relate to reduction in operating costs and the beautification of learning environments?



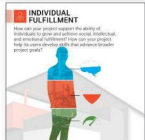
PHYSICAL AND MENTAL SAFETY

What strategies can be implemented to ensure the safety and security of staff, teachers, and students while in school while also considering the emotional well-being of everyone?



SENSE OF BELONGING

The student population comes from a variety of socioeconomic backgrounds and the buildings should be reflective of the students. Allocation of and access to resources shall be equitable within the district and community. Participants emphasized the importance of creating a welcoming, accessible, and emotionally safe experience for all.



PRIDE IN BOWLING GREEN SCHOOLS

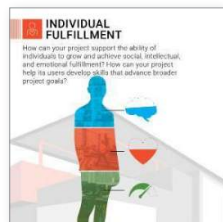
How can a classroom, dining commons, music room, or an exterior courtyard portray the cultural identity of the students and the surrounding communities to create a place that the students are proud to be apart of, and how does the history of the school get threaded through the fabric of the new spaces?

Outcomes

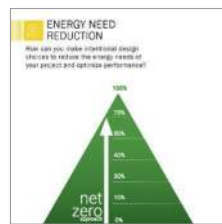
VALUES: Chosen Cards

Which cards did each group select as most important?

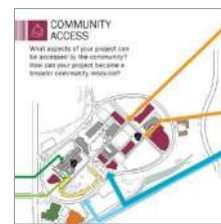
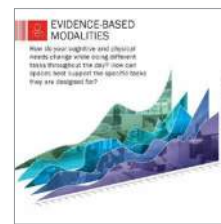
Group 1



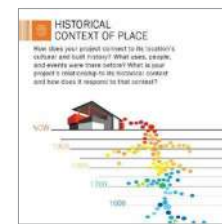
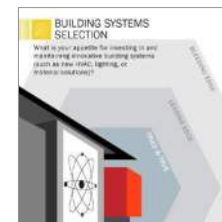
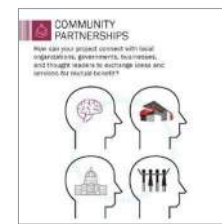
Group 2



Group 3



Group 4



Amplify Community Access & Partnerships

Theme

During the workshop, a prominent theme that emerged across all participant groups was the aspiration to create an educational environment that fosters community support and meaningful partnerships. The schools are envisioned not only as centers of learning but also as valuable resources for the greater community. By forging these partnerships, the district aims to provide students with opportunities to explore diverse career pathways that they may not have been aware of otherwise, and to provide spaces to better support community initiatives, programs, and events.

Goals

DEVELOP LOCAL COMMUNITY PARTNERSHIPS

Engaging students with different community partners will not only allow students to have the resources in the community to support them academically, but it also makes the school district accessible to the community. Community partners create dynamic learning environments exposing students to real world applications in the hopes to raise, train, and retain students.



METRIC: How many students are hired by local partners after school graduation? How many internships are provided?



KPI: Provide learning spaces with the resources and equipment that mimic real world applications.

STRONGER BGSU CONNECTION

Create pathways between Bowling Green City School students and Bowling Green State University to enrich educational experiences and foster professional growth that can be beneficial to both school systems.



METRIC: What percentage of students are enrolled in BGSU courses each year as part of their high school courses?



KPI: Faculty and students from university are conducting guest lectures, workshops, and mentorship programs as part of the district programs in all grade levels.

COMMUNITY USE

Improve the connection between neighborhood communities and schools by strategically collaborating on community-focused events that can be hosted in schools.



Metric: Survey community members on potential barriers to accessing a building.

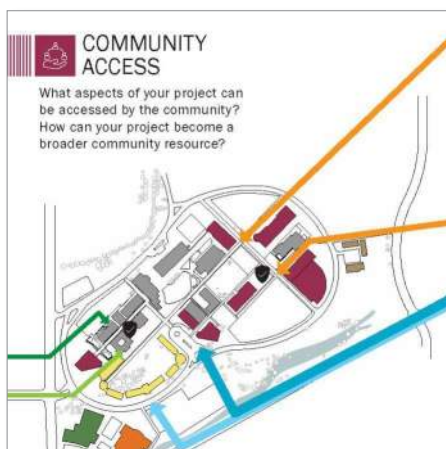


Metric: Measure community engagement with the school and its programs/resources to understand who the school is currently reaching and who it can target to expand its reach.

- # of total and new supporters
- # of events with outside partners



KPI: Plan monthly events at the schools to bolster awareness of spaces and resources that can be utilized by community.



Sense of Belonging



Theme

During the workshop, participants recognized the significant amount of time students spend in school buildings throughout their educational journey. With this in mind, they emphasized the importance of prioritizing inclusion in school design to create supportive and equitable environments where everyone feels as though they belong. While the district itself has embraced an inclusive model that supports teachers, staff, and students, the physical buildings currently do not reflect this ethos. Moreover, participants stressed the importance of ensuring that all staff, teachers, and students have equal access to resources and opportunities within the building.

Goals

INCLUSIVE SPACES

Promote a sense of belonging, fairness, and empowerment for all staff, teachers, and students through the design of school facilities. Acknowledge and respect the unique identities and experiences of each person and actively work to eliminate barriers to learning environments and create an environment that fosters success and well-being for everyone involved.



METRIC: Regularly assess inclusivity efforts and collect feedback from individuals.



KPI: Implement changes based on identified needs and concerns.



KPI: Ensure that school facilities, including classrooms, media centers, labs, playgrounds, and common areas, are designed and equipped to be accessible for all students.

EQUITABLE ACCESS TO RESOURCES

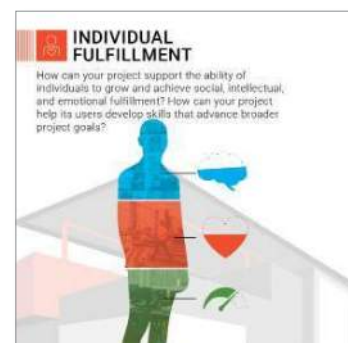
Ensure all staff and students have equal opportunities to utilize and benefit from school facilities and resources. By setting these goals and implementing strategies to promote equitable access, schools can create an inclusive and supportive environment that allows every staff member and student to thrive and reach their full potential.



METRIC: Continuously evaluate and monitor the effectiveness of initiatives aimed at promoting equitable access. Collect data on student participation, engagement, and outcomes to identify areas for improvement and ensure that all students have equal access to educational opportunities and resources.



KPI: Address reported barriers to resource access and proactively eliminate obstacles that may impede the effectiveness of both staff and students.



Energy Reduction


Theme


In the past year, three district buildings without air conditioning were equipped with mini splits in each classroom. Looking ahead, participants stressed the need to prioritize building systems and their operations to ensure occupant comfort year-round. The district and the wider community share an understanding of the significance of energy reduction and are receptive to initiatives that benefit the entire district.

Goals

BUILDING FOR THE FUTURE

The selection of building systems that reduce the building energy cost will not only drive towards efficiency but also help the school district in managing long term operating costs. Operations staff must be educated on strategies to reduce energy and a comprehensive plan for reduction of energy should be implemented. Results could be shared with the community to raise awareness.


 **METRIC:** Document and compare energy cost prior to and after any renovation or new build. Track continued energy cost and reduction of need.


 **KPI:** Provide educational sessions about the sustainability measures implemented in the building to educate students, staff, teachers, and the community about the advantages of the intuitive technology systems and the positive impact they have on the environment.


 **KPI:** Require all design and construction teams provide life cycle cost assessments of proposed systems.

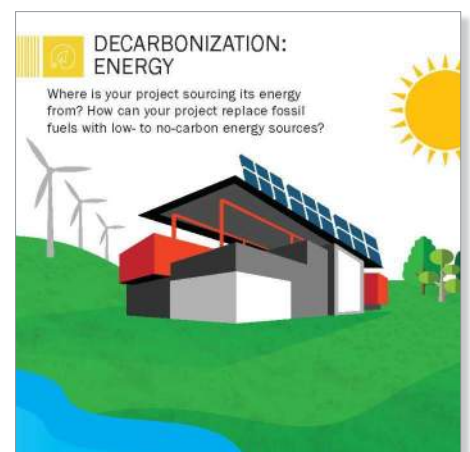
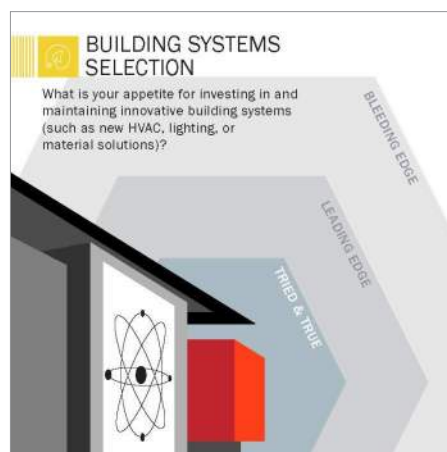
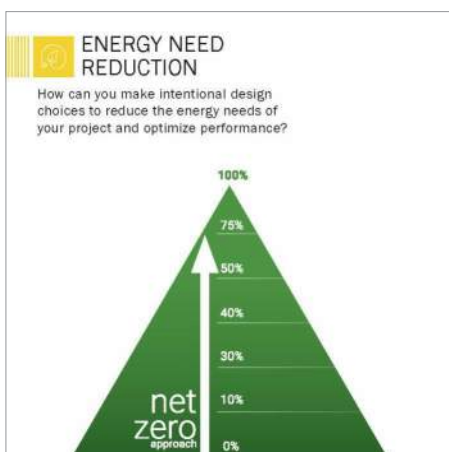
EFFICIENCY FOR EXISTING OPERATIONS

Improve energy efficiency of existing buildings by first benchmarking the energy consumption of the buildings and then identifying opportunities to improve energy. Opportunities may be capital improvements to replace under performing equipment or operational enhancements to implement monitoring based commissioning. Efficiency operations are likely to be more applicable at the middle school.

 **METRIC:** Measure energy use intensity for buildings to better understand peak demands and cost per unit of energy.

 **METRIC:** Compare current energy consumption and costs at current middle school and analyze how sustainable systems such as geothermal wells and solar power can improve energy demands.

 **KPI:** Implement yearly energy audits at school buildings. Reviewing energy bills will provide helpful insights into energy use and may pinpoint areas for energy efficiency measures.



Physical and Mental Safety

Theme

Safety and security is a conversation impacting school systems nationally. Participants discussed and questioned how to best integrate safety and security measures. There was consensus that it encompasses various aspects including physical security, emotional well-being, and community engagement. The theme highlights the importance of creating an environment where everyone feels safe, protected, and supported. It also emphasizes the collaborative efforts required to address safety concerns and implement effective strategies for prevention, response, and recovery.

Goals

PHYSICAL SAFETY

Integrate passive and active strategies into the school buildings to ensure a secure and safe environment that protects the well-being of students, staff, and visitors.



METRIC: Regularly practice emergency drills, such as fire drills, lock-down drills, and evacuation procedures, to familiarize students and staff with safety protocols. Provide ongoing training to staff members on emergency response procedures



KPI: Implement comprehensive security measures, including controlled access entry systems, secure vestibules, surveillance cameras, passive surveillance, reduced sight lines, and controlled public access to zones of the building.

EMOTIONAL AND MENTAL SAFETY

Establish a supportive and inclusive school culture where every student feels valued, accepted, and safe.



METRIC: Measure frequency of documented behavioral issues and lock downs each year.



METRIC: Provide opportunities for team-building activities, peer mentoring, and conflict resolution programs to enhance relationship-building skills.



KPI: Foster a positive school climate by encouraging respectful and empathetic interactions among students, teachers, and staff.



KPI: Designate specific areas within the school where students can seek support and find respite when they are feeling overwhelmed or distressed. These safe spaces can be designated rooms or designated staff members trained in providing emotional support.

SECURITY PROTOCOLS

Provide staff and students with updated emergency preparedness plan and ensure proper engagement with the security team at all school sites.



METRIC: Provide minimum twice yearly safety and security sessions to all staff and students.



KPI: Informal student and security/resource officer “open lunch” sessions where students can ask questions about safety and security measures. Sessions promote and build relationships.



Pride in Bowling Green Schools

Theme

The workshop discussions revealed that the district aims to create an educational environment that instills a sense of excitement and pride within the community. The district aspires to be a source of pride for parents and students alike. To achieve this, participants explored the idea of showcasing the schools' rich history while celebrating the individuality of every student who walks through their halls. Creating learning environments that convey a sense of care and investment will foster a strong sense of "Bobcat Pride" in the school's physical space.

Goals

BUILDING A SCHOOL IDENTITY

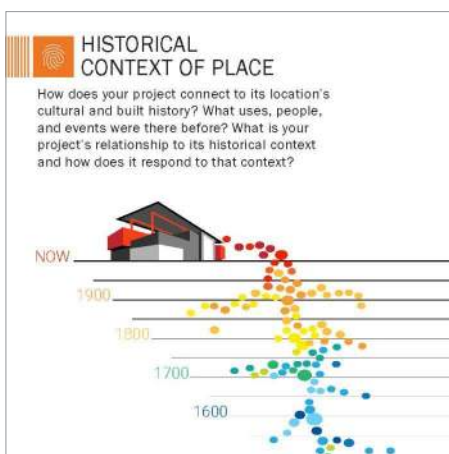
A core part of the learning experience is understanding the rich history that the school district is built on. Incorporating art from the community, the culture or photographs from the history of the school is a great way to create a sense of pride in the students and staff. The school needs to be a representation of the diverse, multi-cultural community it serves.



KPI: Engage community artists to showcase art and design permanent art at schools that speak to the cultural identity and history of the school.



KPI: Implement graphic "branding" for creating an identity at schools.



RETAIN AND WELCOME

As private schools and homeschooling over recent years has seen an influx of student enrollment, the district is prioritizing creating educational facilities that will retain students within the community and also welcome new students through open enrollment.



METRIC: Survey parents and students living within the district (attending or not attending the district schools) asking them to describe what would promote pride within the schools.



METRIC: Measure the enrollment numbers as upgrades to the district facilities are being made and track against projections.



KPI: Prioritize addressing feedback from survey in strategic plan and decisions made during design and construction of facilities.

AN INSPIRATIONAL SPACE

Beauty is in the eye of the beholder, but spaces that inspire have the ability to motivate students, open the possibility of creative thinking, and stimulate different approaches to teaching and learning.



KPI: For new school buildings, and additions/renovations, ensure the District vision is at the forefront in all decisions.



KPI: Continuously refer to and use the facility master plan to ensure learning spaces support district pedagogy now and into the future. Update document to align with strategic plan initiatives.



KPI: Engage design professionals who will partner with the district in creating learning spaces that align with district goals of future ready learning.



APPENDIX

The following pages include supporting materials and documentation of the results of the activities included in the VALUES workshop.

Activity 2

Report, Observe, Measure

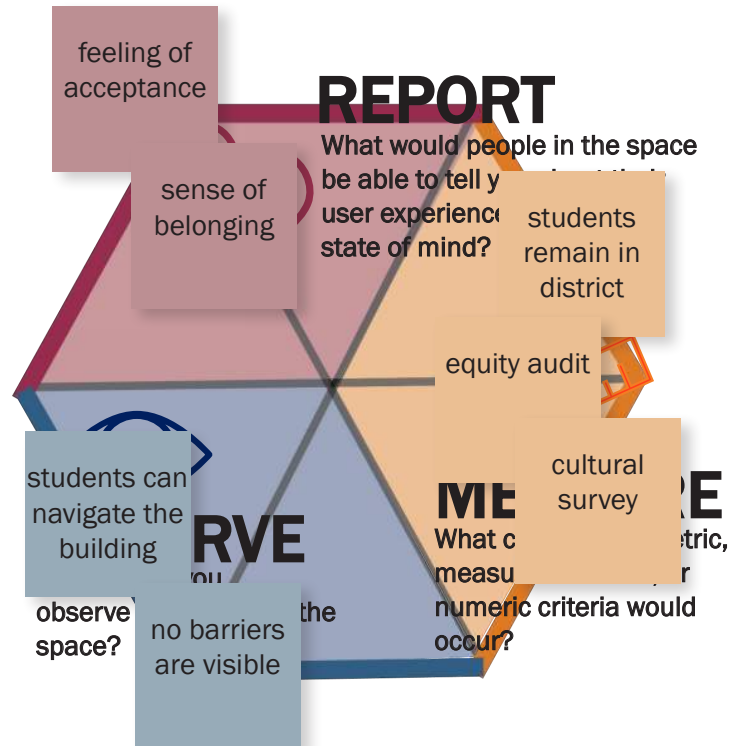
Group 1

Defining Success

If the desired outcomes for



are successfully met...

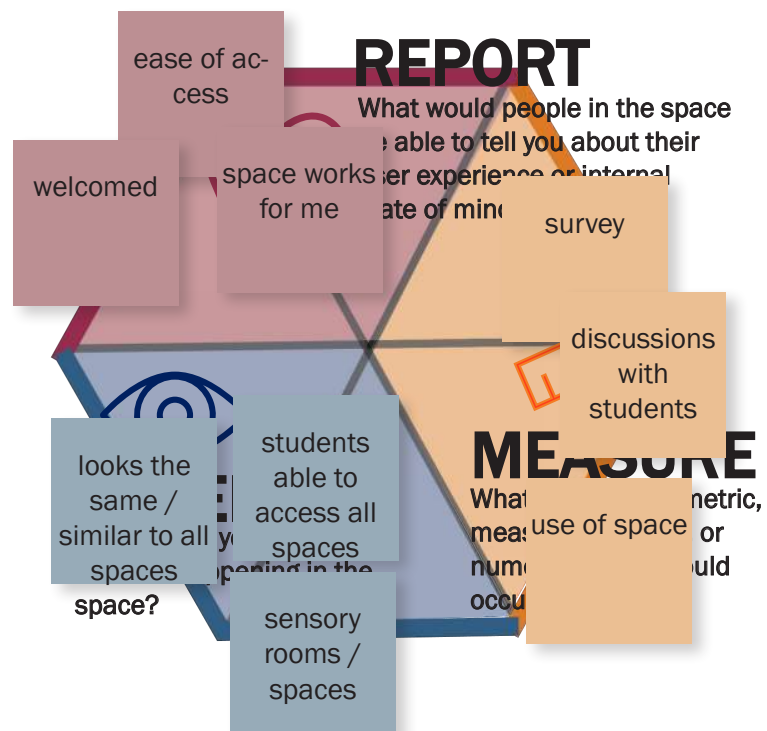


Defining Success

If the desired outcomes for



are successfully met...



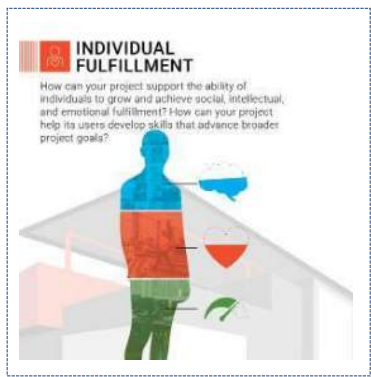
Activity 2

Report, Observe, Measure

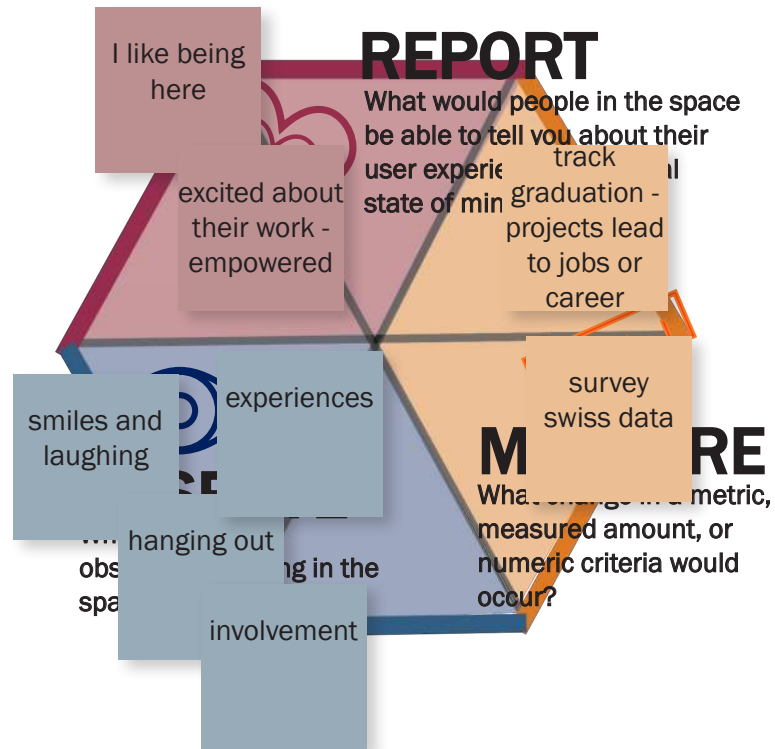
Group 1

Defining Success

If the desired outcomes for



are successfully met...

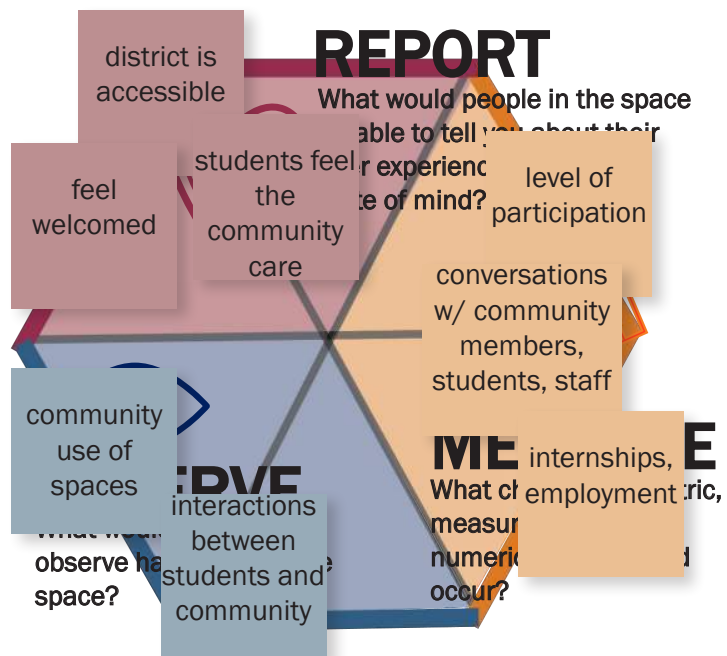


Defining Success

If the desired outcomes for



are successfully met...



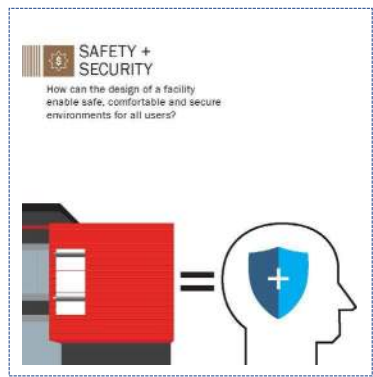
Activity 2

Report, Observe, Measure

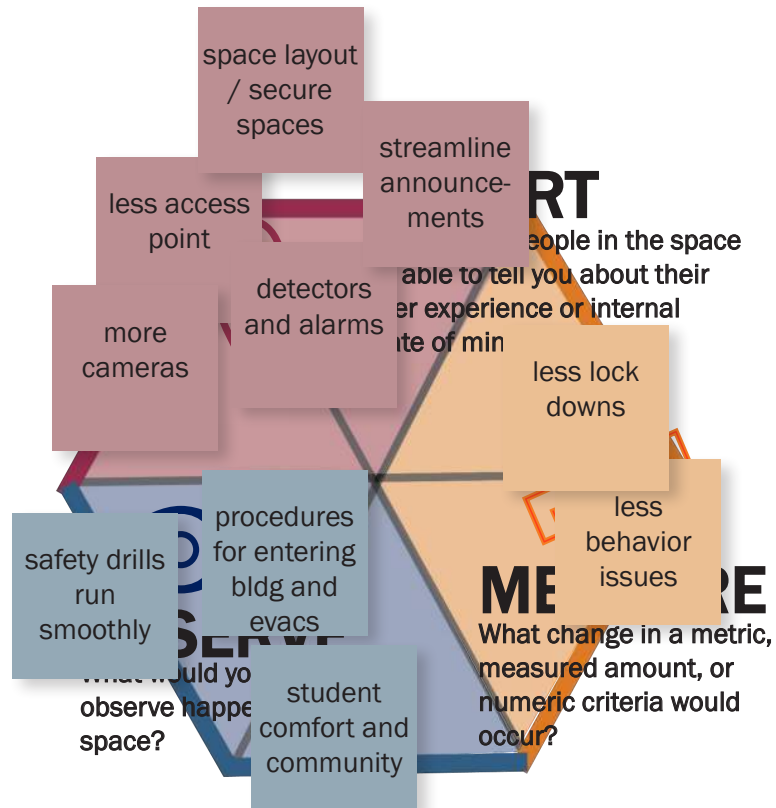
Group 2

Defining Success

If the desired outcomes for



are successfully met...

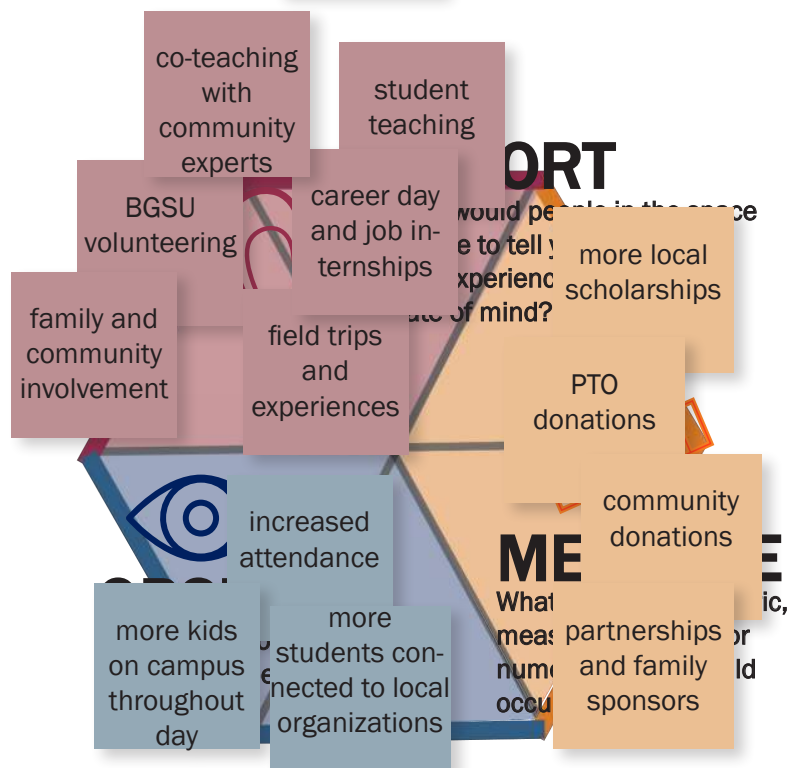


Defining Success

If the desired outcomes for



are successfully met...



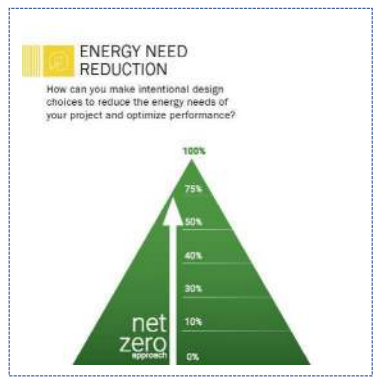
Activity 2

Report, Observe, Measure

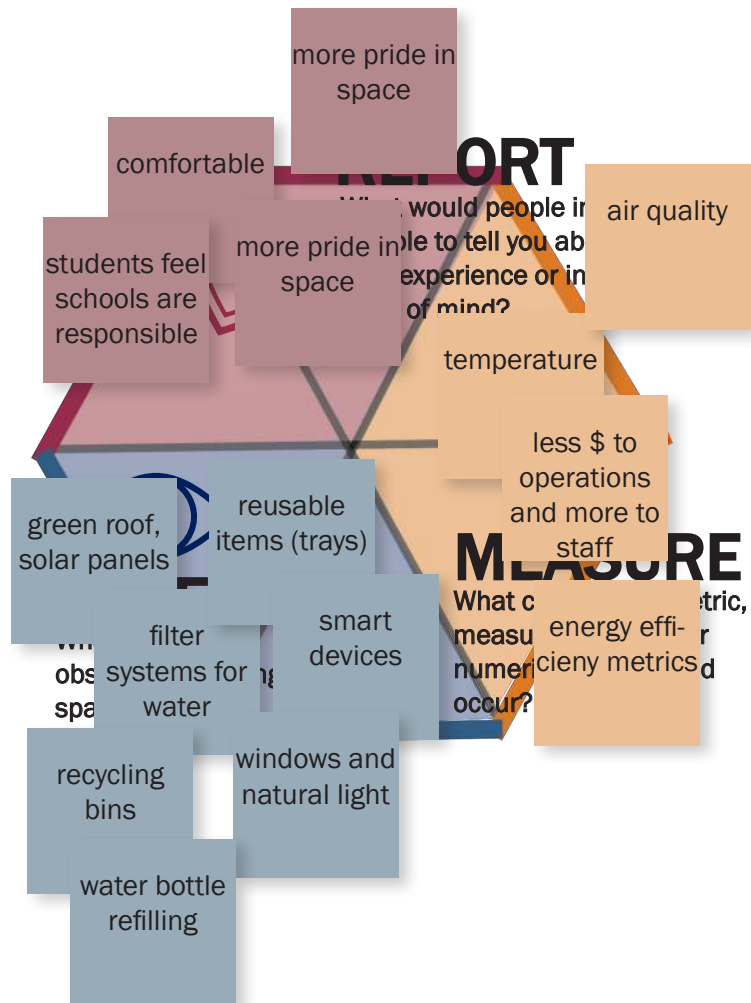
Group 2

Defining Success

If the desired outcomes for



are successfully met...



Activity 2

Report, Observe, Measure

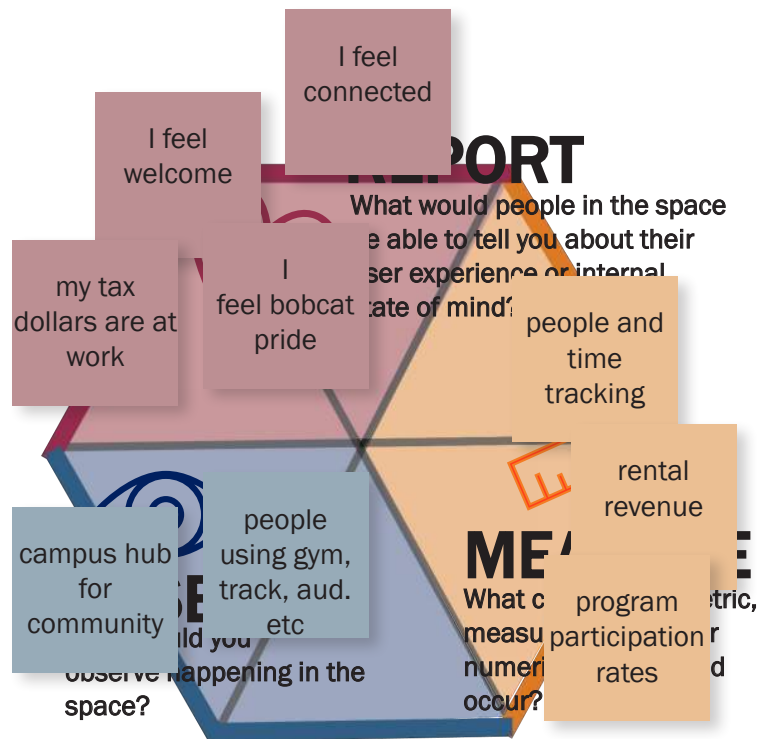
Group 3

Defining Success

If the desired outcomes for

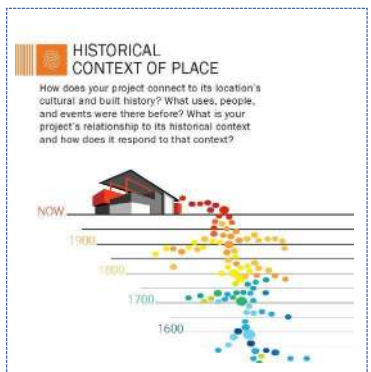


are successfully met...

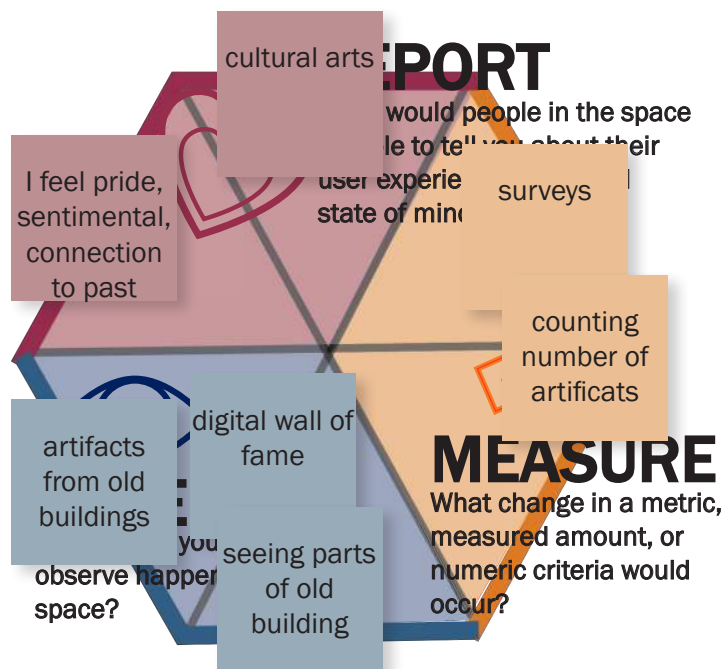


Defining Success

If the desired outcomes for



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Activity 2

Report, Observe, Measure

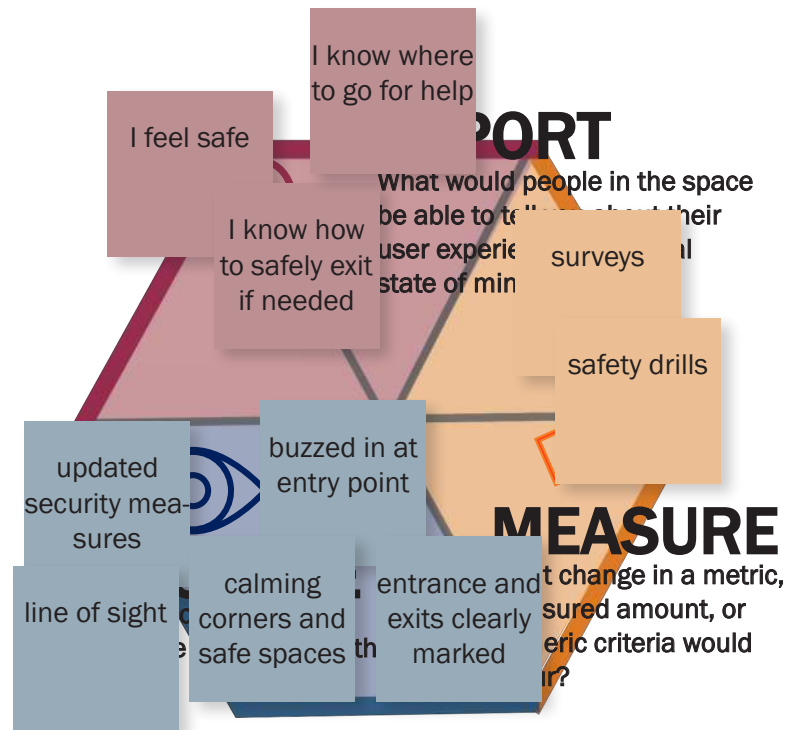
Group 3

Defining Success

If the desired outcomes for



are successfully met...

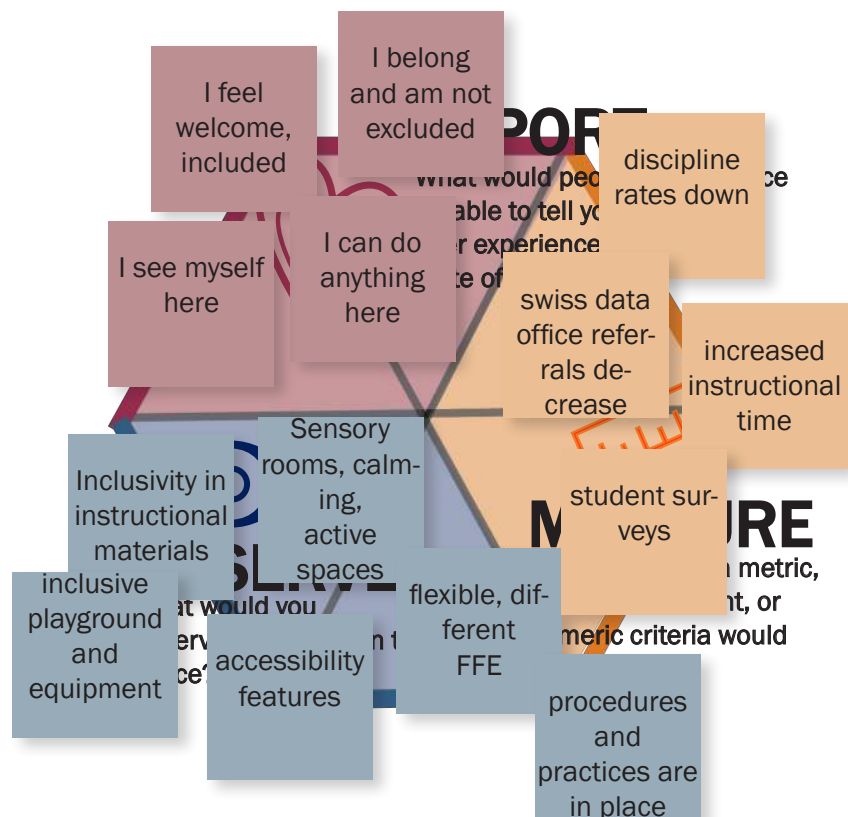


Defining Success

If the desired outcomes for



are successfully met...



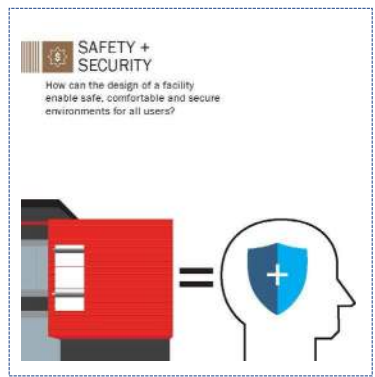
Activity 2

Report, Observe, Measure

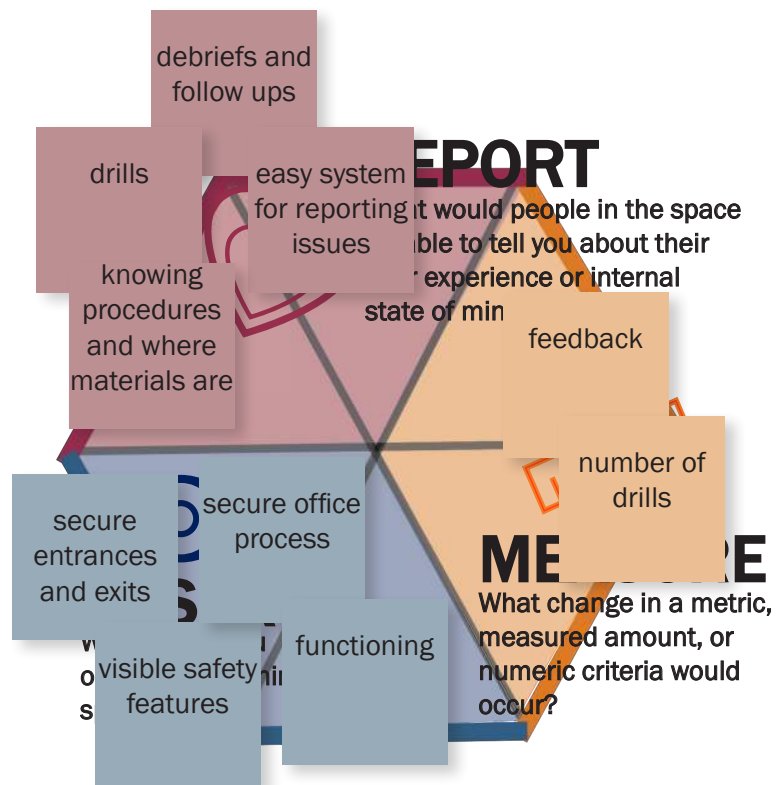
Group 4

Defining Success

If the desired outcomes for

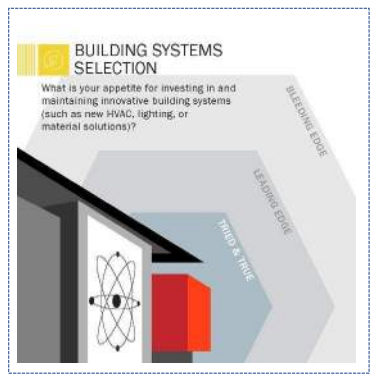


are successfully met...

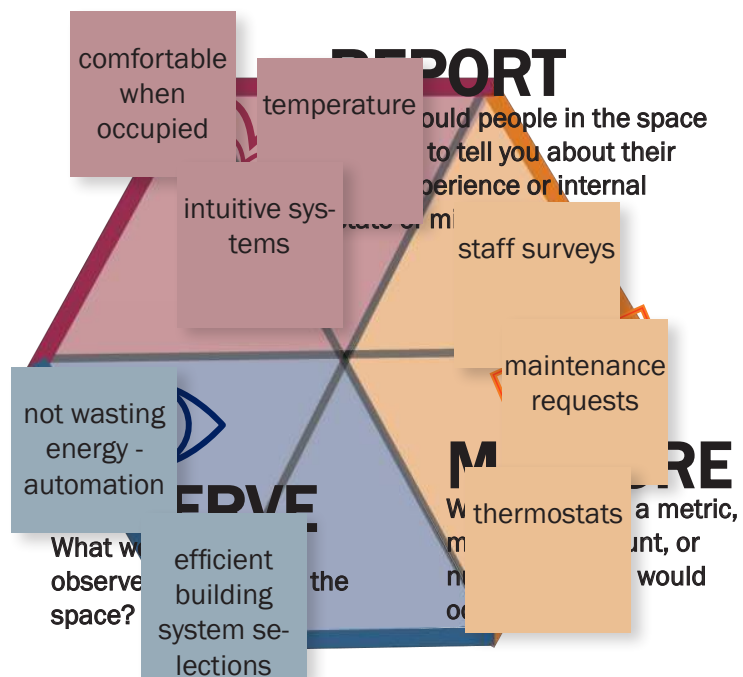


Defining Success

If the desired outcomes for



are successfully met...



Activity 2

Report, Observe, Measure

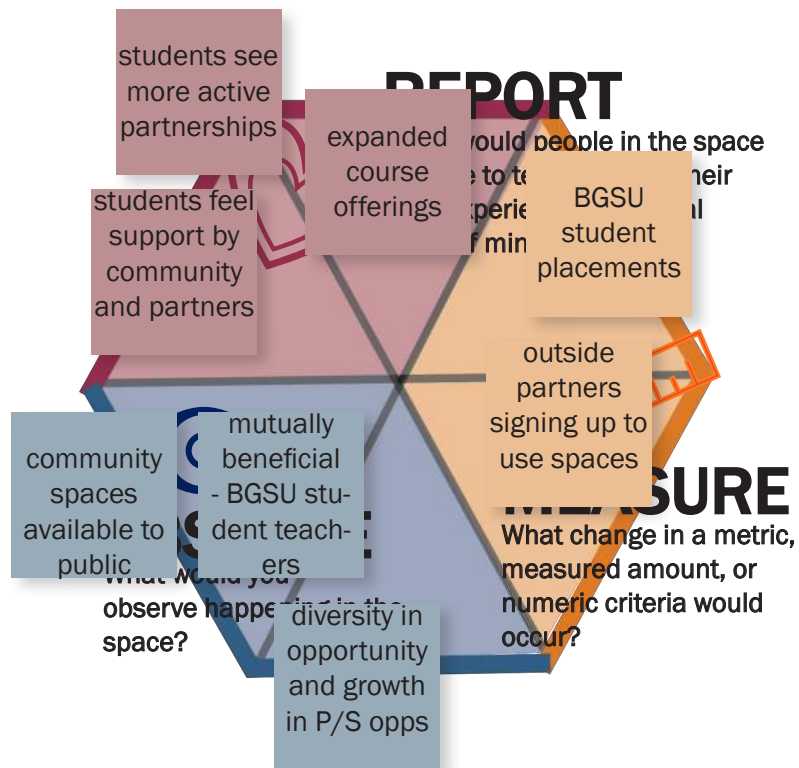
Group 4

Defining Success

If the desired outcomes for



are successfully met...



Activity 3

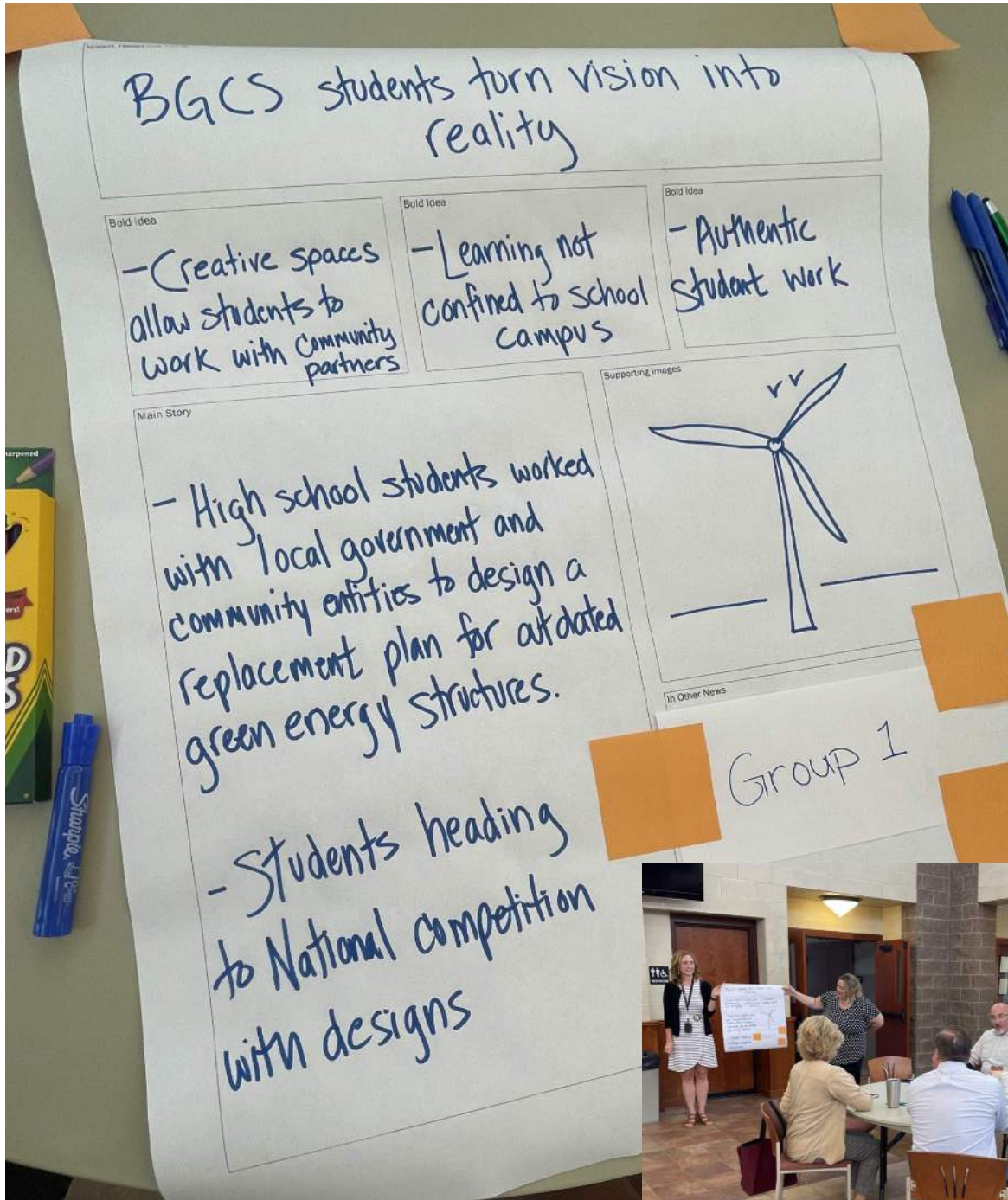
Headline Exercise

KEY QUESTION

Think 20 years into the future. If the Bowling Green City School District and its building succeed in accomplishing its goals, what does that future look like?

Note: Activity allows participants to dream into the future. Headlines are not current factual events.

Group 1



Activity 3

Headline Exercise

KEY QUESTION

Think 20 years into the future. If the Bowling Green City School District and its building succeed in accomplishing its goals, what does that future look like?

Note: Activity allows participants to dream into the future. Headlines are not current factual events.

Group 2

Insert Headline Here

BG Schools Continue to be a Showcase of Solutions

Bold Idea

Top rating in ODE - District Report Card

Bold Idea

BG Grads Partner with Elon Musk's Space X Program

Bold Idea

The District Continues to Thrive Financially Due to Cost Saving Efforts.

Main Story

Blueprint for school districts to model.

Blueprint for school and community partnerships.

Blueprint for community engagement and buy-in.

Graduate students who are future facing and ready to solve complex issues of the day.

**This is
a solution.**

Supporting Images



In Other News



Headline Exercise

Note: Activity allows participants to dream into the future. Headlines are not current factual events.

A collage of images and text related to a community growth plan for a high school expansion. The main title at the top is "Community Growth Spurs Plans for Second High School/Campus Expansion" in purple. Below it are three "Bold Idea" boxes: "Campus Development - or - 2nd HS", "BGSU partner for Educator training", and "State of the Art design - (stream)". The "Main Story" section lists "Campus vision", "Career Pathways", "4 day week", "Advanced Technology", and "Open Campus - evenings weekends". There are three images: a modern library interior with blue seating, a classroom with students, and a man holding a presentation board. A banner reads "TRANSFORM YOUR SPACE." and another says "INNOVATE YOUR VISION and take your next project from render to reality". At the bottom, green text says "Community debates merits of single-campus vs. building another HS." and a photo shows people at a meeting.



Activity 3

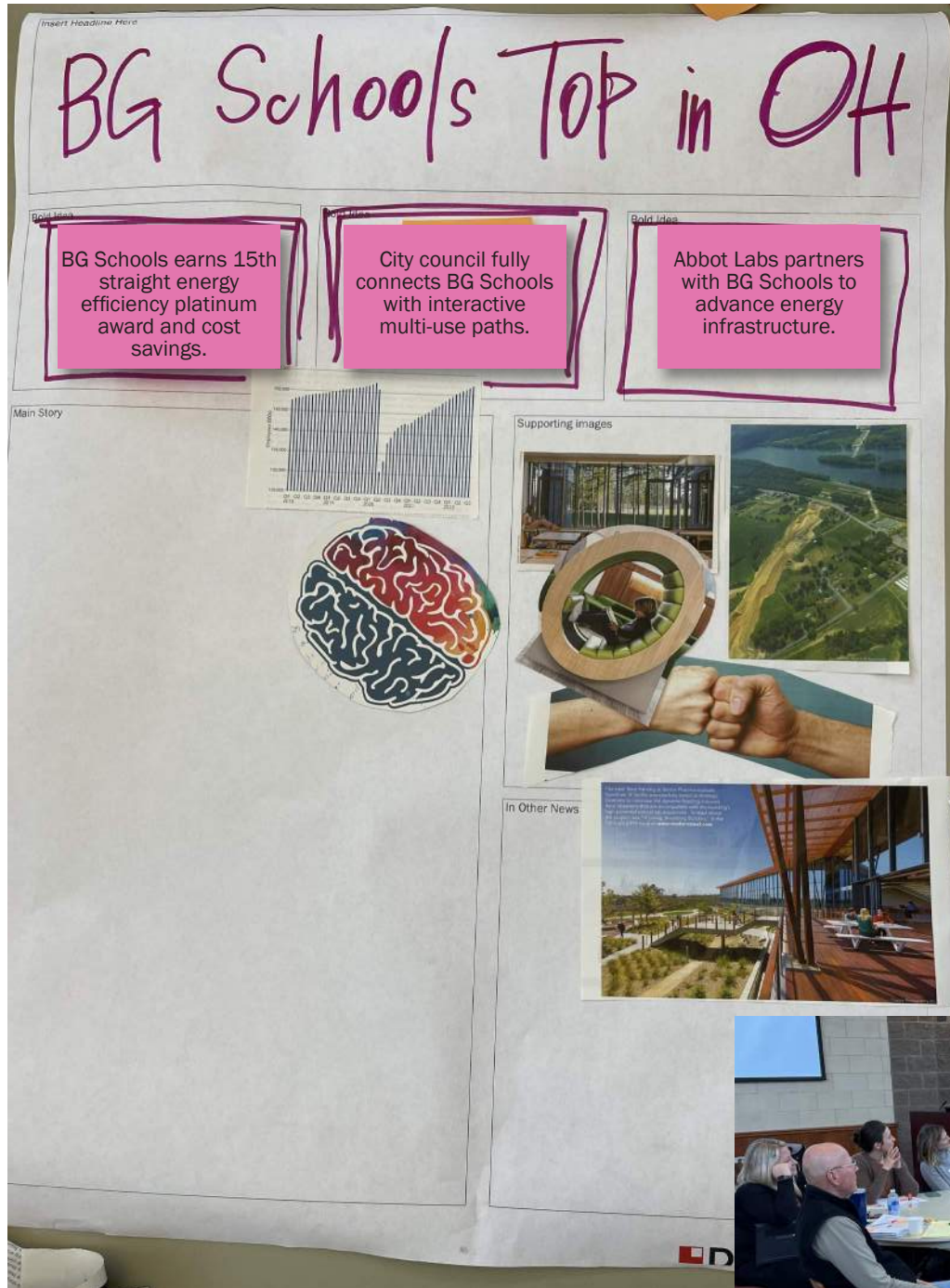
Headline Exercise

KEY QUESTION

Think 20 years into the future. If the Bowling Green City School District and its building succeed in accomplishing its goals, what does that future look like?

Note: Activity allows participants to dream into the future. Headlines are not current factual events.

Group 4





 **DLRGROUP**