Executive Summary

The Gilroy Unified School District’s Brownell Middle School serves 900 6th, 7th, and 8th grade students. Built in the 1950’s, the school was ready for replacement. The original finger plan classroom wings are undersized and in disrepair.

With the only parameters being to maintain the current multi-purpose room and gym, the GUSD Superintendent of Schools asked this provocative question of the Aedis design and planning team:

“What could we do with this site if we approached it as a blank slate?

This question kicked off a stakeholder engagement process with a campus committee made up of district and campus leadership, facilities staff, teachers, and parents who were asked to get deeply personal and vulnerable.
The campus committee engaged in a series of three workshops each building upon the last. The results were a set of four community goals, a collaborative design process and a transformed campus that is currently under construction.

Brownell Middle School Community Goals:

1. *Feel welcoming, safe and secure for everyone.*
2. *Inspire student centered deeper learning.*
3. *Be beautiful and support overall health and wellbeing.*
4. *Be flexible and adaptable to change.*

The result of a comprehensive planning process and integrated design is an innovative design solution that will completely transform teaching and learning and deliver a positive community impact for many decades to come.
Scope of Work and Budget

Scope of Work

The existing Brownell Middle School campus consists of approximately 17.5 acres with several single-story buildings. The new site design includes 6 small learning communities, an administration building, a library/media center, and a kitchen addition to the existing multi-purpose building.

New construction will also include the addition of a new staff parking lot at the north end of the site, and staff and visitor parking lot west end for approximately 100 stalls. School signage, a new marquee sign, and multiple independent custom shade structures are also planned.

Modernization and site improvements will include the existing multi-purpose building, the gym, PE and athletic facilities, pedestrian hardscape, landscaping, drop off facilities along the west and east side of the school, and new on-site utilities.

Buildings to be demolished include 6 classroom “wings”, 13 portables. A total of 37 classrooms will be demolished and replaced. In addition, the library, food service/kitchen facility, and a un-permitted greenhouse will also be removed and replaced. The new campus will be constructed in phases and the first phase is currently underway.

Construction Budget: $57 Million

Project Delivery Method: Lease-Leaseback
School and Community Engagement

The Gilroy Unified School District (GUSD) community is located in the southernmost region of Santa Clara County. The current student population is more than 11,000 K-12 students. Gilroy Unified School District is also the largest employer in the City.

Known for its garlic fields, the agricultural areas that surround Gilroy provide a diverse array of agribusiness opportunities for its occupants. The Gilroy Garlic Festival is an annual celebration of Gilroy’s agricultural heritage.

The town has also become home to commuters to Silicon Valley and San Jose. The community has a strong sense of identity that stems from its history and its present, its natural and its built environment.

The Design team worked closely with the School District leadership, faculty, and parent representatives. Local public safety agencies—police and fire—were brought in as advisors. Numerous public meetings, committee meetings, and workshops were held to garner support and input.
The main challenges to overcome were a history of failed attempts by other architects to design a school that met both the district's budget and educational vision, and a divided campus in terms of progressive and traditional instructional values.

Key assets of the Brownell Middle School include a large mostly flat site, an experienced facilities and maintenance team, and engaged leadership that was open and supportive of a robust and transparent stakeholder engagement process.

The district is growing and prosperous and has done an excellent job of serving their diverse community. The long term stable district leadership has nurtured an environment of shared values that has been sustained over time. These shared values both embrace and celebrate the local agricultural history while boldly moving forward into the future.
School and Community Engagement

The value of the process and project to the community at large is two-fold. First as a means to meet the goals and objectives set forth by the GUSD Board of Education and second to ensure an engaged community of stakeholders bring their knowledge and expertise to the design team.

An integrated multi-disciplinary design process was employed to ensure that the project team achieved the most effective and efficient future ready and future proof flexible design solution for the aging middle school in desperate need of replacement.

The successful design solution was achieved by establishing clear community goals and a shared design vocabulary from the start. These critical steps laid the foundation for an interactive collaborative site planning process.

The results of this process is a project that the entire community can be proud of and take ownership in.
The Aedis planning team engaged the campus and district stakeholder representatives in three workshops:

1. The **Design Thinking Workshop** delivered the attributes of the ideal middle school learning experience and a set of guiding principles.

2. The **Primordial Spaces Workshop** expressed the guiding principles as physical spaces within an ideal learning community.

3. The **Site Planning Workshop** explored how ideal learning communities could be developed on the campus site.
Workshop 1 - Design Thinking

Design Thinking has 5 stages: empathy define ideate prototype and test (Stanford d.school).

The stakeholders paired up and conducted empathy interviews with each other to identify the attributes of their partner’s ideal learning experience. They created a list of their partner’s needs and the insights during the define stage.

They ideated by sketching small thumbnail sketches of their partners needs. And then they built prototypes that illustrated their partners ideal learning experience. To test their prototypes they observed their partner engaging with them and recorded their feedback.

The results were a set of guiding principles and a clear understanding of those key attributes of the ideal learning experience that are shared among a diverse group of stakeholders.
Workshop 2 - Designing with the Primordial Spaces

The main purpose of this workshop was to develop a common vocabulary to facilitate collaboration between diverse stakeholder representatives and the design and planning team.

The six primordial spaces popularized by David Thornburg and Core Education are watering hole, mountain top, sandpit, cave, campfire, and LIFE. Each of the metaphors describe the basic design and function of a space as well as how they cue different teaching and learning behaviors.

Working together, the cross-functional stakeholder teams used the primordial spaces game pieces to design a small learning community for 150 students. They were able to explore opportunities to leverage physical space to impact learner outcomes and deliver ideal learning experiences.

The conceptual designs the stakeholder teams created were then further developed by the planning and design team.
Workshop 3 - Site Planning

The capstone workshop of the series was site planning. The stakeholder teams worked together to explore various options. Tasked with incorporating all the primordial spaces as well as the guiding principles across the entire site, they considered both the functional and aesthetic components. Each team iterated many possible solutions before settling on one to present to group.

Presentations were lively as teams advocated for their designs and debated the pros and cons of each solution. The shared understanding and collaborative spirit with which they approached the workshop allowed for healthy conflict and a deep appreciation for all the various points of view.

In the end there was no clear winner, however, the process illuminated many shared priorities. The design and planning team recorded the process and outcomes. This robust and informed design debate and discussion was invaluable to developing a site plan that reflected stakeholder input.
Educational Environment

2. Outdoor building, testing and experimenting, typ.
3. Indoor building, testing and experimenting, typ.
4. Performance and presentations.
5. Social gathering and community building.
6. Research, reading, collaboration and access to technology.
7. Play and physical movement.
8. Student centered space, flexible furniture and movable interior partitions, typ.
Educational Environment

Educational Vision:

Key aspects of the educational vision from the GUSD goals and objectives include the desire to achieve Deeper Learning via creativity, critical thinking, communication, and collaboration.

Educational Goals:

Activate STEAM curriculum that combines/cuts across multiple disciplines in order to develop student **critical thinking** skills.

Deliver instruction through Problem Based Learning in the form of long term group projects that develop student **creativity** skills.

Develop student **communication** and **collaboration** skills with Socio-Emotional Learning integrated with all academics.

PBL diagram courtesy of Ohio University Libraries
Educational Environment

The GUSD stakeholders created the prototype for their learning environment during the interactive workshop “Designing with the Primordial Spaces”, where they made the connection between deeper learning and physical space.

**Primordial Spaces:**
Watering Hole, Mountain Top, Sandpit, Cave, Campfire

Problem Based Learning, a key instructional delivery method for STEAM, begins with an introduction to the problem. This is delivered in the Mountain Top presentation space.

Students then gather in small groups to engage in a Campfire discussion to identify what they know and what they need to know in order to form their problem statement.

This is followed by Cave time where students conduct independent research and critically think about the problem.

In the Watering Hole students from different learning communities gather spontaneously and drop in on each other’s conversations, cross-pollinating ideas.

The Sandpit is where creative experimentation and prototyping takes place.
Educational Environment

The resulting design is a collection of highly flexible and adaptable grade level small learning communities that provide opportunities for students and teachers to seamlessly and flexibly transition through all of the primordial spaces.
Every inch of the Brownell Middle School campus is designed to flexibly accommodate a wide variety of teaching and learning styles in order to reach every one of the diverse group of students.

The design solution incorporates Universal Design for Learning (UDL). The why, what and how:

- Each small learning community includes a hands on learning science lab/maker space as well as a state of the art library/media center to engage and stimulate interest.

- There are a wide variety of learning spaces to support the presentation of information and content in different ways.

- Students have choices as to where, when, and how to express what they know visibly on campus in the growing, creating, and performing spaces.
Educational Environment

Maximum **flexibility** means meeting teachers where they are today as well as providing options for **adapting** to the future. The teachers that feel more comfortable “owning” a classroom have the freedom to do so. The teachers that want to experiment with team teaching, outdoor learning, and hands-on projects have the freedom to do so.

Future ready means choice. State of the art technology, flexible furniture indoor/outdoor connectivity means teaching and learning can happen anywhere at anytime.
Physical Environment

1. Small Learning Community, typ.
2. Outdoor Learning Courtyard, typ.
4. Amphitheater and Quad
5. Entry Courtyard/Main Entrance
6. Library/Media Center
7. Edible Gardens
8. Secure Perimeter
Physical Environment

These early concept sketches demonstrate the power of collaborative design. Campus committee, landscape design, educational planning, interior design, and the architecture team worked together in an integrated process.

The site design evolved into 6 grade level small learning communities clustered around a verdant central quad. The design reinforces Brownell Middle School as a progressive, agile, 21st century, flexible and future ready educational environment.
Physical Environment

“Gilroy Strong”

The recent tragedy at the 2019 Gilroy Garlic Festival which resulted in loss of life and serious injury to a dozen festival attendees has brought the issue of safety for students into the larger context of the community. Gilroy Strong has emerged as the rallying cry for the community that is determined to continue to grow and prosper. The reimagined Brownell Middle School campus serves as inspiration and evidence of this community resilience.

The four principles of Crime Prevention Through Environmental Design (CPTED) guided the design of the physical attributes that support the community goal of welcoming, safe and secure for everyone.

The small learning communities are each independently gated, are visually accessible from the center of campus, and are contained within a fenced perimeter.

Wayfinding to the administration office is intuitive and accessible leading to a warm welcoming and secure visitor check-in counter.

“Gilroy pledges to remain strong in wake of festival shootings.”

Quote and images courtesy of PBS News Hour, July 30, 2019
Physical Environment

“Why can’t school feel like summer camp?”

Imagine you are at your favorite summer camp. Within a lovely valley surrounded by rolling hills, a ring of tent cabins line the perimeter, and in the center a gathering space, where stories, meals, and secrets are shared.

Summer camp memories are rich with inspiration because they include both trials and triumph.

Motivated by fresh air, sunshine, and a natural desire to explore and investigate, campers learn new skills, practice new skills and teach new skills building character and resilience. The camper begins the summer unsure and ends the summer confident.

At every scale the design solution evokes the concept of summer camp. From the site plan, to the learning courtyards. School can feel like summer camp!
Inspire student centered deeper learning.

The Primordial Spaces were used to achieve the educational goals of activating STEAM curriculum, delivering instruction through Problem Based Learning and integrating Socio-Emotional Learning with all academics. This educational goal is reinforced by the community goal “student centered deeper learning.”

A variety of outdoor learning spaces in the quad and within each learning community courtyard as well as the new library/media centered and renovated multi-purpose building are designed to encourage and support ad hoc student brainstorming sessions and the cross-pollination of ideas (watering hole).

Presentation spaces such as the outdoor amphitheater and state of the art presentation technology in every learning environment supports peer to peer learning and a variety of opportunities for students to showcase their work (mountain top).

A science lab/maker space is included in each small learning community making creativity through experimentation easily accessible to all students (sandpit).

Benches and boulders nestled within the abundant green spaces studded throughout the campus are perfect for critical thinking, introspection, and quiet reflection (cave) and flexible furniture and plentiful boulder and bench seating support socratic discourse and story telling (campfire).
Be beautiful and support overall health and wellbeing.

The 14 Patterns of Biophilic Design are used to achieve the community goal of a beautiful campus that supports health and wellbeing.

**Biophilia is...**
*a love of life and the living world;*
*the affinity of human beings for other life forms.*

Using the patterns of visual and non-visual access to nature, dynamic and diffuse daylight, a nature inspired color palette, and biologically inspired design motifs the design solution leverages the positive cognitive, emotional and physical **health benefits** of nature.

The centerpiece of the campus is its verdant central quad. The quad celebrates the **beauty** of nature with abundant native planting, edible gardens, and a curvilinear “stream” that winds its way organically through the campus.
Be flexible and adaptable to change.

The community goal of flexibility and adaptability can be found in the design of the campus itself. Six learning communities allow for numerous different configurations from grade level houses to academies to departmental hubs. The interior and exterior learning environments also accommodate multi-disciplinary team teaching.

Movable interior partitions, garage doors to learning courtyards, and flexible furniture empower reconfiguration of learning spaces in real time as teaching and learning shifts and evolves in response to the foreseeable and the unforeseeable future.

These students will have to make choices about careers and jobs that may not even exist today. To respond and adapt to the unknown students need an environment that responds and adapts to them. Affording them the opportunity to develop autonomy, agency and creative confidence.

Teachers are currently designing new multi-disciplinary curriculum and exploring team teaching possibilities as a result of the flexible design of the indoor and outdoor learning spaces.
Results of the Process and Project

The goals of the GUSD are achieved in the following ways:

Engaging in a robust, collaborative and transparent stakeholder engagement process that included enthusiastic participation from district leadership meets goals 6 and 7.

Goal 1, 3, 4, and 5 are woven throughout the educational and community goals established by the stakeholder group.

A positive and safe school climate (goal 4) is provided through sensitive security design. The City of Gilroy Police Department’s Sgt. Wes Stanford observed the collaborative team’s attention to the CPTED principles and the respect for the Department’s Run-Hide-Defend training protocol. Sgt. Stanford later reported to the community that this was a model approach to planning, reflective of the best practices of everyday school safety and security.

Quality staff (goal 3) is attracted and retained through beautiful functional school design that responds to their needs. Teachers, administrators, and district staff can all look to Brownell Middle School as evidence that their leadership values their input and expertise (goal 6 and 7).

Goal 2, perhaps the most vital goal as fiscal accountability is necessary for ongoing district sustainability, has been achieved with a creative and efficient design and transparent collaboration with the lease-lease back partner. Phase 1 is underway and the project is on schedule and on budget.

Gilroy Unified School District Goals

Goal 1: Increase the level of student achievement for all students throughout the district with a focus on closing the achievement gap.

Goal 2: Maintain fiscal accountability and require sound fiscal management practices.

Goal 3: Recruit and retain a highly qualified staff.

Goal 4: Provide a positive and safe school climate.

Goal 5: Provide equitable learning and working environments.

Goal 6: Practice effective leadership.

Goal 7: Consistently communicate with employees and community.
Results of the Process and Project

The collaborative integrated design process involved the entire project team including the campus committee, design team, consultants, and builder. When campus stakeholders were asked to explain the design to others they found that they were able to clearly articulate the WHY of every design decision. The result of the process was a group of confident advocates for a progressive new vision for Brownell MS that meets community goals, education goals, and district goals.

The design team also facilitated a hands-on flexible furniture pilot to prep teachers for their new campus and to help navigate the classroom management questions that accompany student choice. Teachers discovered that the furniture at three different heights gave them enhanced visual access to their students. Students responded to a survey asking what affect the flexible furniture had on their level of engagement. They reported feeling more engaged!

Flexible Furniture Pilot

Teachers experimented with creating a campfire circle with no furniture. They noticed that flexible furniture allowed them to create open space in the classroom quickly and easily.

Teachers experimented with creating personal cave spaces. Then discussed the necessity for creating student quiet space.