

Northside STEAM Elementary School

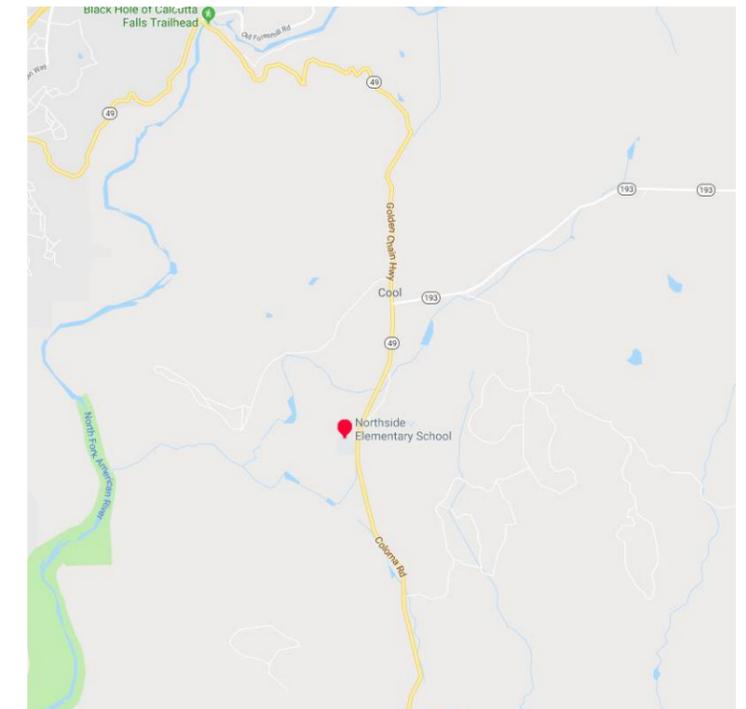
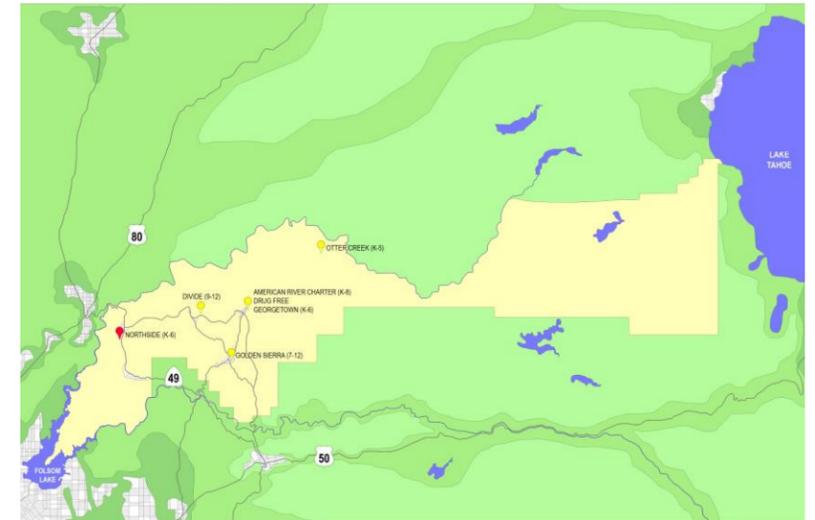
The mission of Northside STEAM School is to enrich and engage our students through a rigorous project-based curriculum infused with Science, Technology, Engineering, Arts, and Mathematics. Our new motto, "Educating the Whole Child," denotes our commitment to not only providing a rigorous and engaging curriculum, but our dedication to supporting the social-emotional well-being and growth of our students. We believe learning comes from making connections between ourselves, our community, and the world beyond. We believe citizens are created by practicing responsible stewardship of ourselves, our community and our world. We believe that to be a learning community means to believe that learners are more than the sum of all of their parts, they are a part of an interconnected system comprised of their environment, creating the whole child.

Narrative Summary

Northside Elementary School is a 16-acre site at the western most end of BOMUSD's District boundary. The school is located in Cool and it is set on the border of BLM lands which extend south west towards Folsom Lake State Recreation Area. Numerous trails and extensive opportunities are afforded by the setting. The school faces enrollment pressures as some students get drawn out of District. Approximately 313 K - 6th grade students attend Northside. The school is energetically transforming its curriculum to embrace the project-based curriculum of the STEAM academic program. Multiple labs supporting the program have recently been established. Gardening is also a passionate pursuit of the campus as two active gardens are currently cultivated, and recent funding is providing for a green house.

The school site is accessed directly off of State Highway 49 via an access road which ends in a cul-de-sac. This site limitation causes significant congestion during drop-off and pick up hours, as a one-way traffic loop cannot be achieved. Resolving this congestion and providing an intuitive and safe flow for drop off-pick up vehicular traffic is a priority. The campus does not have adequate parking. Campus evening events, graduations and other community activities at the campus require the use of the adjacent Church parking lot or the school's playing fields for overflow parking. Increased parking capacity is requested. The campus is a fairly level site divided by three primary quads. As a level site, achieving ADA compliance for pathway connectivity is relatively straightforward. Although the site conditions promote accessibility, most entrance ramps and stairs accessing the buildings are not compliant. Door thresholds and door hardware need to be evaluated in a case by case basis. The landscaping, lawns and trees on the site appear healthy and well maintained. No ADA compliant drinking fountains were observed on site. Although there are numerous opportunities on site for outdoor gathering and teaching there are a lack of shelters to provide comfort and to encourage student congregation. The sites IT infrastructure has significant failings. Currently the campus is interconnected with a combination of IP based and Copper based systems. Most Alarms and P.A. rely on the copper backbone. This backbone is failing, especially in inclement weather and needs to be replaced and upgraded to the appropriate system. Hardscaping and striping in the courtyard areas are under a continued maintenance schedule and areas of recently maintained clearly differentiate themselves from those needing repair. The playfields have some drainage issues. The infrastructure to claim well water / ditch water is not functioning. Currently the school's fields are irrigated with Municipal water at a significant cost. Revitalization of the well/ditch water irrigation system is desired.

The most recent buildings on site, the Kindergarten was built in 2012 and what is to be the future SDC classroom built in 2010 are in good shape and we have no comments. Administration - Library building and 400 building were built in 1993, with the Administration wing receiving a substantial modernization in 2012. The current Administration building is sighted so that minimal visual control is available for monitoring the campus entrance. A reconfigured traffic pattern will likely result in a reconfiguration of the Administration spatial layout. The Multi-Purpose which contains a Kitchen and Stage was built in 1983. All finishes, with exception of the MP playing surface are at their end of life. The Kitchen and storage areas require expansion. The stage does not have a compliant means of access or egress. Building 600 the oldest building on campus, is a unique Architectural asset. Being the oldest building, it also has significant maintenance and code deficiencies which have rendered it mostly non-functioning as fulltime dedicated classroom space. It is recommended that this building become fully modernized to regain its functionality. When 600 regains full functionality, this would have the added benefit of bringing students back into the campus core and relieving the necessity to keep some portables. The remaining permanent building have varying degrees of deferred maintenance and code deficiencies which require addressing. These items are covered in greater detail in the Assessment. Most remaining portables are 30 years old, 10 years past their anticipated lifespan. Some of them have been converted to ad-hoc uses such as storage and or single use activities which support the STEAM curriculum. It is our recommendation that most of these portables because of their advanced age be removed from the campus. Within the classroom and Library, the addition of flexible furniture will enhance project-based and small group learning. Student achievement and 21st century learning are being supported by the campus's IT upgrades of both student terminals and classroom multi-media teaching stations.



Assessment | Summary



PARENT DROP OFF/PARKING
Drop off is not ADA accessible.



FIRE LANE/ CROSS TRAFFIC
Fire lane is narrow and drop-off exit shares entrance. Raises safety concerns.



INTERIOR/EXTERIOR
Update MP vertical circulation Accessibility and Code items



HVAC
Complete campus HVAC upgrades.



CAMPUS CORE
Replace existing and provide new shade areas



CAMPUS CORE
Significant accessibility concerns throughout campus.



INTERIOR/EXTERIOR
600 Roof leaks



LEARNING ENVIRONMENTS
Relocate / Arrange existing stacks and add flexible furniture



CAMPUS CORE
Amphitheater underdeveloped resource not accessible



CAMPUS CORE/FIELDS
Drainage issues. Exposed dugouts. Reduce reliance on Municipal water.



INDOOR ENVIRONMENTS
Complete campus wide lighting fixture updates



INTERIOR / EXTERIOR
Increase visibility from Administration interior to drop off areas

Sustainable Sites Entry + Outdoor Learning + Fields

Create safe, barrier free learning environments incorporating efficient and effective storm water management, landscaping, lighting and surfaces.

Water Efficiency Irrigation + Plumbing Systems

Improve the efficiency of fixtures, appliances and irrigation systems to reduce domestic water usage

Energy & Atmosphere HVAC & Renewable Energy Systems

Optimize energy efficiency and performance to minimize environmental impacts and reduce operating costs associated with fossil fuels.

Indoor Environment Electical + Lighting + Technology

Enhance air quality, thermal comfort, natural light, acoustic performance and physical environments while reducing pollutants. Provide a safe, healthy, functional environment to help motivate students and encourage attendance

Materials & Resources Exterior + Interior Finishes

Improve the learning environment and extend the life-cycle of facilities while encouraging the use of efficient sustainable materials and reducing waste.

Innovation & Design 21st Century Education

Encourage the innovation in high performance school design creating safe, motivating and sustainable learning environments that reduce dependence on non-sustainable sources.

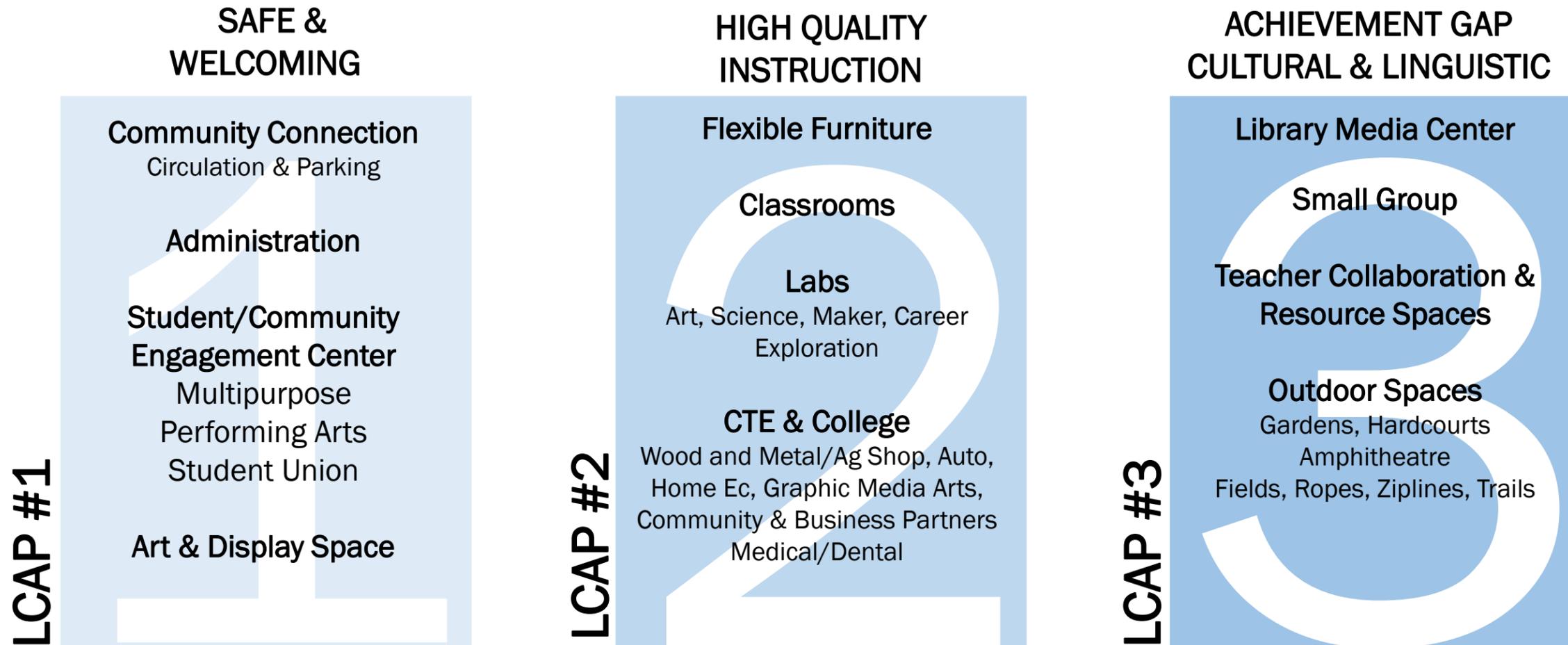
Assessment | Site Constraints + Opportunities



- 1 Ingress/Egress concerns: No sidewalks or crosswalks to campus from parking lot. Parking/drop off area does not have double lanes of drop off, which raises safety concerns. The vehicle drop off zones are not ADA compliant.
- 2 Cross traffic congestion
- 3 The administration building does not have good visual access to the campus entry
- 4 Underutilized permanent building
- 5 Multipurpose needs modernization. Kitchen undersized
- 6 A new shade structure is desired.
- 7 Portable have exceeded useful lifespan .
- 8 Unoccupied and or underutilized portables which have exceeded lifespan
- 9 Gardens
- 10 Bluebird Boxes
- 11 Provide shade for dugouts
- 12 Provide ADA access and equipment
- 13 Parent Center
- 14 Auburn Rec Area
- 15 Outstanding Views

Step 2 | Identify Educational Goals & Needs

Facilities Strategies for achieving BOMUSD's Strategic Plan & Local Control Accountability Plan (LCAP) Goals



Black Oak Mine USD Schools as Center of Community(s)

Strategic Plan Overlay | “Kit of Parts”

The JK Architecture Engineering team worked collaboratively with the district’s steering committee through a series of committee workshops. The primary emphasis within this process was to understand Black Oak Mine USD’s educational goals and desired learning outcomes for its student. If “form follows function”, then in educational design “form follows curriculum.” The collective engagement of the district and community participants focused on understanding how Black Oak Mine USD’s facilities can be modernized, transformed or created to support these educational goals.

The primary foundation for the education visioning focused on the district’s Strategic Plan/Local Control Accountability Plan (LCAP) goals. These goals are as follows:

- Goal 1:** *Ensure all school sites have safe, welcoming and inclusive climates for all students and their families, so that all students are in their classes ready to learn.*
- Goal 2:** *Provide high quality classroom instruction and curriculum with an access to a broad course of study promoting school college and career readiness.*
- Goal 3:** *Reduce the achievement gap by ensuring that all systems are culturally, linguistically, and equitably responsive to the needs of our students.*

Through these collaborative processes the team reviewed local, regional and national trends to visualize how facilities could support Black Oak Mine USD’s educational goals. We utilized these best practices to establish a “Kit of Parts”. Once finalized, the Kit of Parts document was distributed to each school site. Steering committee representatives and school site principals compiled recommendations on how to support each campus’ specific goals. The outcome of these responses became the foundational overlay for aligning each campus’ educational goals amongst the district goals.

The following pages include a copy of the “Kit of Parts” package that are used to solicit specific school site feedback. The responses received will be included within each of the school site master plan documents, as well as the Innovation and Education category for transformational costs.

Homework Assignment (due date 04-26)

STRATEGIC PLAN/LCAP GOAL #1

“Ensure all school sites have safe, welcoming and inclusive climates for all students and their families, so that all students are in their classes ready to learn.”

1.1 COMMUNITY CONNECTION – CIRCULATION & PARKING



There are opportunities for vehicular & pedestrian areas of improvement on each campus. This may include addressing ADA accessibility compliance, safe routes to school, segregated vehicle & bus areas, parking, fire lane access, etc. We recommend that when improvements are made to each campus that these areas be addressed as well. We have proposed a possible solution to guide future consideration of these issues, but an in-depth assessment is required at each site to determine a complete and adequate solution. Please see the attached exhibit for your review & comments.

- Ingress/Egress is a high priority at our campus and needs to be addressed as soon as possible.
- Ingress/Egress is a moderate priority at our campus and we will address it as we modernize our campus in the future.
- Ingress/Egress is a low priority at our campus. We have trained our population and it is relatively safe.
- A change in signage and/or fencing/gates will solve many of our problems.
- Other: _____

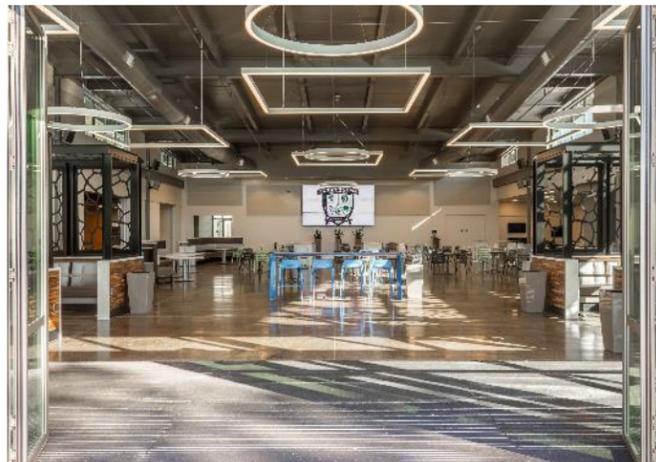
1.2 ADMINISTRATION



Good planning on our educational campuses and best practices for school site safety is to position the Administration area in a location that has good visual oversight of the pickup / drop off areas and provide direct access from the visitor parking area without having to enter the campus. Does your campus Administration area fulfill these practices and/or what areas of improvement are needed?

- Our Administration area fulfills these best practices.
- Our Administration area is in need of the following improvements:
 - Location is good, but need more exterior windows for improved line of sight.
- Our Administration area needs to be relocated.
- Other: _____

1.3 STUDENT & COMMUNITY ENGAGEMENT CENTER



Presentation and gathering spaces are essential for sharing the school's culture with the community. This can be done with formal presentation space, like a theater or by hosting events in a Multipurpose Room or Gym. What needs does your campus have for indoor student & community engagement activities?

- We use our existing _____space(s) for our large gatherings.
 - This existing space fulfills our needs.
 - This existing space does not support our needs.
 - We have the following needs within this space:

- We need more gathering spaces on our campus
 - We wish for the following: (Multipurpose, Cyber Café, Commons, Student Union, Theatre)

- Other: _____

1.4 ART & DISPLAY SPACE



Art & Display is a great opportunity to celebrate the history and culture within a school. This expression allows for students to feel connected to their physical environment as well as a sense of pride and ownership.

- We have sufficient display space on our campus.
- We need more display spaces for showing student work to the campus and greater community.
- Other: _____

STRATEGIC PLAN/LCAP GOAL #2

Provide high quality classroom instruction and curriculum with an access to a broad course of study promoting school college and career readiness.

2.1 FLEXIBLE FURNITURE



Incorporate flexible furniture throughout my campus. This may include classrooms and labs, the library, cafeteria or multipurpose room, transition areas outside of classrooms, offices, teacher workrooms, and pull-out classrooms.

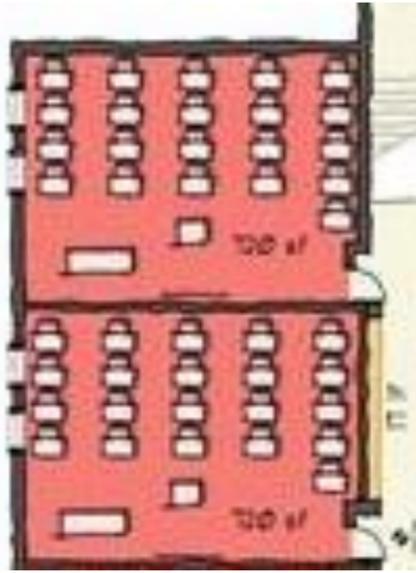
Flexible furniture should allow students to choose a seat based on their personal needs and activity, should be easily reconfigured for small groups, large groups, or individual work. Tables and seating need to accommodate multiple learning media, including technology and charging needs. A variety of soft seating and “hard” or focused seating should be available.

- Yes, we need flexible furniture at our campus.
 - We should consider full replacement of furniture for equity throughout campus.
 - We should consider phasing replacement of furniture to test the best options.
- No, our campus culture/curriculum does not call for flexible furniture.

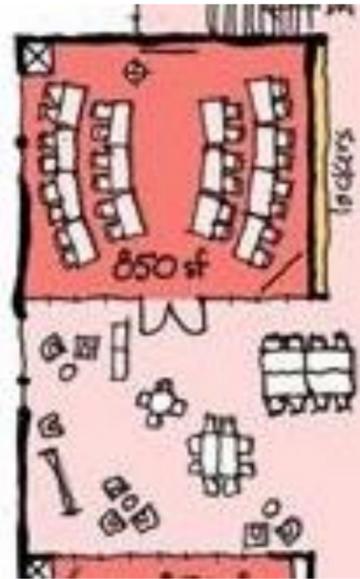
Specific quantity, type, color, and layout of furniture is beyond the scope of this master plan and requires further discussion per site. Your feedback will help us project cost to the district and correctly prioritize this solution.



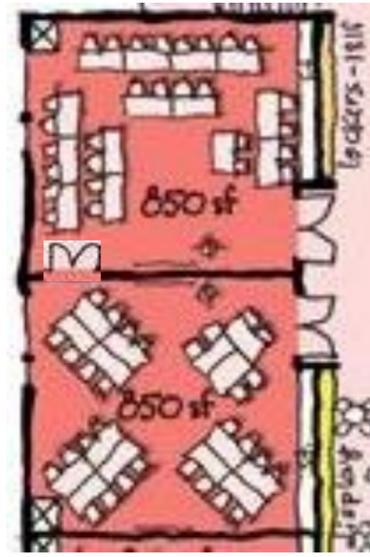
2.2 CLASSROOM (SIZES & CONFIGURATIONS)



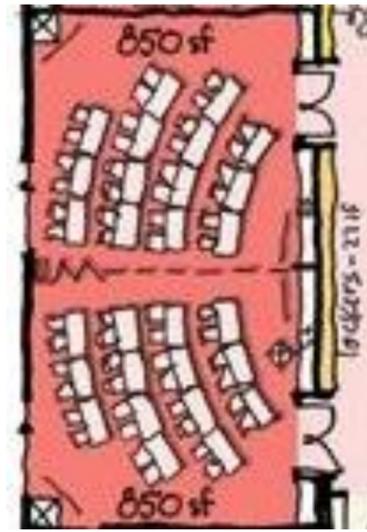
Concept 1:
Typical Classroom



Concept 2: Studio Concept



Concept 3: Flexibility w/ Connectivity:



Concept 4: Team Taught



Doors closed provide extra whiteboard surfaces and a traditional classroom setting. Doors open allow for interdisciplinary team-teaching and large group activities.

To support high quality classroom instruction that is student focused, relevant to curriculum needs, flexible and collaborative it is important to consider classroom sizes and configuration.

Concept 1: Typical Classroom. Support a traditional single teacher/class of students.

Concept 2: Studio Concept. Creates an opportunity for a shared Studio Space between or adjacent a set of classrooms. This Studio Space could be used for shared projects, small group activities or independent learning through the oversight of the adjacent classroom instructor.

Concept 3: Flexibility with Connectivity. Incorporates a door/window opening to foster the collaboration between classrooms.

Concept 4: Team Taught. Incorporates a folding partition (like the example on the bottom left) that allows for both traditional and collaborative 2 instructors and 2 classroom of students.

- Our current classroom sizes & configurations meet our educational needs.
- We see value in creating some classrooms that support these configurations.

We see the following quantity of classroom configurations per grade level or per campus (circle one)

Concept 1: Typical Classrooms _____

Concept 2: Studio Concept _____

Concept 3: Flexibility with Connectivity _____

Concept 4: Team Taught _____



2.3 ELEMENTARY SCHOOL (INTRODUCTORY) LABS

Art & Science Lab



An Art & Science Lab is separate from individual classrooms and delivers specific curriculum. It will have durable work surfaces, sinks, and materials necessary for projects.

- No, we do not need an Art / Science Lab at our campus.
- We currently use the following space(s) for Art / Science:

- We have a lab but it needs the following improvements:

- Yes, we need a lab for Art, Science. Dedicated or Shared Spaces (circle one)

Music/Fine Arts/Performance Lab



A Music/Fine Arts/Performance is a space dedicated to these disciplines outside of the normal classroom setting. It may include a stage or performance space, and material storage, tiered seating for band/choir, etc.

- No, we do not need a Music/Fine Arts/Performance lab at our campus.
- We currently use the following space(s) for Music/Fine Arts/Performance:

- We have a lab but it needs the following improvements:

- Yes, we need a lab for Music/Fine Arts/Performance Lab.

"Messy" Project Lab/Maker Space



A "Messy" Project Lab/Maker Space is an interdisciplinary zone that may include tools/workshop space, technology, collaborative brainstorming space, sinks and supplies for creating. These spaces usually have an indoor-outdoor connection to inspire students and allow for overflow workspace. Curriculum that could be delivered in this type of lab could include Science, Technology, Engineering, Art, and Math.

- No, we do not need a messy project lab/maker space at our campus.
- We currently use the following space(s) _____
- We have a Project Lab but it needs the following improvements:

- Yes, we need a messy project lab/maker space.

2.3 ELEMENTARY SCHOOL (INTRODUCTORY) LABS (cont'd)

Reading & Technology Lab



A reading & technology lab is a space where students can improve and enjoy reading, researching, and improving technological proficiency. Flexible furniture, soft seating, technology materials, technology/reading support and traditional books are key to these spaces. This lab would be large enough to accommodate a full class of students or small groups/individuals as needed.

- No, we do not need a reading & technology lab at our campus
 - We currently use Room _____ and plan to keep it
 - Our campus culture/curriculum does not call for a reading & technology lab.
- Yes, we need a reading/technology lab
 - Transform our library into something like this
 - Our library is not adequate for both of these functions and needs expanded; or, we need a new room to create this space.

Fitness Lab



A fitness lab is a place where students can learn to be physically healthy. It needs plenty of open space for students to be active as well as equipment for sports/activities.

- No, we do not need a fitness lab at our campus:
 - We currently use our multipurpose/outdoor spaces for fitness and this space is adequate.
 - These spaces are not adequate and need the following improvements:

- Yes, we need a fitness lab.
 - The fitness lab should be designed to support the following functions and can be shared with:

2.3 JUNIOR/SENIOR (EXPLORATORY/PATHWAYS) LABS

Art & Science Lab



Art & Science Labs are separate from individual classrooms. It will have durable work surfaces, sinks, and materials necessary for projects.

- No, we do not need an Art / Science Lab at our campus.
- We currently use the following space(s) for Art / Science:

- We have a lab but it needs the following improvements:

- Yes, we need a lab for Art, Science. Dedicated or Shared Spaces (circle one)

Music/Fine Arts/Performance Lab



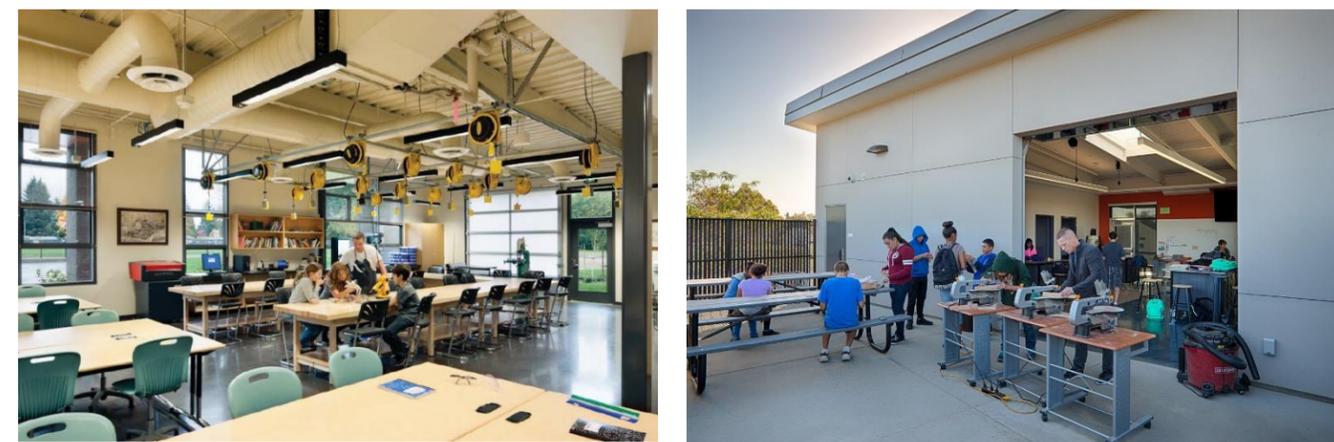
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- No, we do not need a Music/Fine Arts/Performance lab at our campus.
- We currently use the following space(s) for Music/Fine Arts/Performance:

- We have a lab but it needs the following improvements:

- Yes, we need a lab for Music/Fine Arts/Performance Lab.

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A "Messy" Project Lab/Maker Space is an interdisciplinary zone that may include tools/workshop space, technology, collaborative brainstorming space, sinks and supplies for creating. These spaces usually have an indoor-outdoor connection to inspire students and allow for overflow workspace. Curriculum that could be delivered in this type of lab could include Science, Technology, Engineering, Art, and Math.

- No, we do not need a messy project lab/maker space at our campus.
- We currently use the following space(s) _____
- We have a Project Lab but it needs the following improvements:

- Yes, we need a messy project lab/maker space.

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Reading & Technology Lab



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- No, we do not need a reading & technology lab at our campus
 - We currently use Room _____ and plan to keep it
 - Our campus culture/curriculum does not call for a reading & technology lab.
- Yes, we need a reading/technology lab
 - Transform our library into something like this
 - Our library is not adequate for both of these functions and needs expanded; or, we need a new room to create this space.

Performance & Fitness Labs



A fitness lab is a place where students can learn to be physically healthy. It needs plenty of open space for students to be active as well as equipment for sports/activities. The lab needs to be covered to accommodate rainy days, but does not necessarily need to be indoors. The size may vary based on campus needs.

- No, we do not need a fitness lab at our campus:
 - We currently use our multipurpose/outdoor spaces for fitness and this space is adequate.
 - These spaces are not adequate and need the following improvements:

- Yes, we need a fitness lab.
 - The fitness lab should be designed to support the following functions and can be shared with:

2.4 JUNIOR/SENIOR (CTE, INDUSTRY, COMMUNITY) LABS

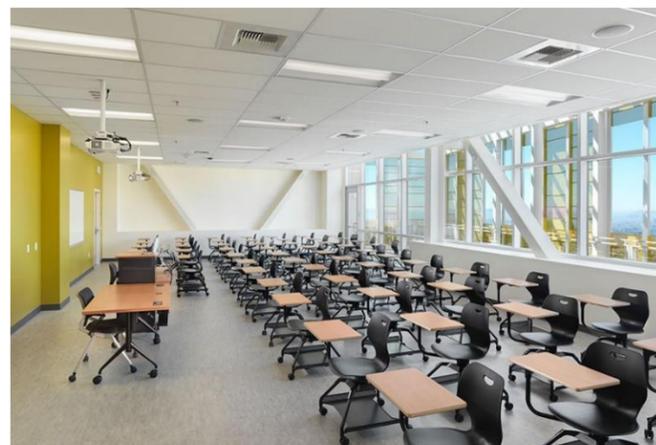
 Industry/CTE/Pathways Labs



The industry/CTE/Pathways Labs are designed to deliver a very specific technical program. Golden Sierra has some existing shops and facilities to deliver these programs already. Are these adequate and/or should we be planning for more?

- Yes, our facilities are adequate
- We need the following upgrades in:
 - Automotive/Metal : _____
 - Wood Shop: _____
- We would like to consider dedicated and/or new facilities for the following pathways and anticipate the following needs:
 - Automotive : _____
 - Metal / Ag Shop: _____
 - Wood Shop / Mill: _____
 - Medical / Dental: _____

2.4 JUNIOR/SENIOR (CTE, INDUSTRY, COMMUNITY) LABS



Providing opportunities for articulation with Los Rios Community College and the opportunity for college credits can be invaluable for high school students. To support this opportunity some dedicated and/or shared spaces may be needed.

- Yes, our facilities are adequate to support this opportunity.
- No, we need the following types of spaces:
 - _____
 - _____

STRATEGIC PLAN/LCAP GOAL #3

Reduce the achievement gap by ensuring that all systems are culturally, linguistically and equitably responsive to the needs of our students.

3.1 LIBRARY MEDIA CENTER



Libraries can be treated in many ways and may differ between grade levels. In all cases, they should be comfortable spaces where students can read and research. Information and the environment should be relevant to students' learning.

- Our current library meets our school's needs.
- Our library does not meet our school's needs:
 - We need flexible furniture/soft seating to accommodate a full class of students and/or individuals
 - We need more space to add more books/technology/furniture
 - The next time we paint our library or replace the flooring, use color, texture and graphics to make our library more inviting and inspiring.
 - Other: _____

3.2 SMALL GROUP SPACES



Small group spaces are critical to 21st century learning environments. They can occur by grouping furniture in small groups within classrooms, creating workspace between classrooms, or by partitioning areas of the library for small group use. It is important that small groups be supported by technology, work surfaces, and writable surfaces to be productive and flexible. What kind of small group spaces are needed at your campus?

- No small group spaces are needed.
- Flexible furniture in classrooms to quickly form small groups when needed.
- Flexible furniture/technology in the library to support small groups
- Spaces shared in- between classrooms where students can be pulled out of class to work in small groups or with another professional
- Common spaces (interior pods or wide hallways or outside) that students can use for small group work beyond the classroom.
- Other: _____

3.3 TEACHER COLLABORATION SPACE



This is a space where faculty can gather to share ideas, lesson plans, have formal meetings and socially connect. This may be a dedicated teacher space like a teacher lounge or staff room, or may take place in the library, multipurpose room, or existing common pods.

- We already use the following space(s) for teacher collaboration/staff meetings:

- We need furniture to support teacher collaboration
- We need teacher collaboration space:
 - Transform our staff room/common areas/work room into a teacher collaboration area
 - We need a new space for teacher collaboration in small groups
Per grade level, grade level groupings, department, campus (Choose One)

3.3 RESOURCE SPACES



Providing space for Resource Programs on each campus is important. Often time, by default empty classrooms get taken over for needs that do not require the entire square foot usage. Your assistance in understanding the quantity & use of dedicated and shared support spaces would help to determine the actual facilities needed.

- We have the following Resource Program spaces on campus and they are located:

- Our Resource Programs have adequate space.
- Our resource programs are not located in an ideal location on our campus. Consider re-organizing room locations to better serve our program needs.

- Our programs could benefit from different room configurations than a typical classroom space. Consider this when it is time to replace/upgrade portables.

3.4 OUTDOOR SPACES



Outdoor learning spaces mix up the environment that students learn in, support hands-on learning, promote healthy lifestyles and balance in student's lives. They can be student focused, include seat walls and gathering spaces, may be covered or uncovered, be terraced, or include the campus garden.

- We have good outdoor learning spaces on our campus
- Our outdoor spaces need some work to be productive spaces
 - We need landscaping to support outdoor learning
 - We need seat walls/benches/tables to make our outdoor spaces more productive
 - We need a covered outdoor area
- We want an amphitheater/large group outdoor gathering space
- Other: _____

3.4 FIELDS



Fields have been a concern at almost every campus we have assessed. Maintenance is needed on all fields at some level, but the kind of repair/replacement varies throughout the district. What should the Facilities Master Plan assume for your site?

- Replace with an all-weather/artificial turf field.
- Re-grade & re-plant field (replace field with new traditional field)
- Patch holes and re-plant field
- Other: _____