New Academic Building Addition

"A small step for mankind....."
A large step for progressive education

Renovations and additions for Phase 2 of Wilson High School's new Academic Building provided an opportunity to continue a process begun in Phase 1 in 2003, transforming the campus with a vision for progressive education at the high school level. District wide educational goals established the framework to create this new learning model in hopes that its planning principles and design philosophy become a catalyst for future high school projects.

The new Academic Building presented two challenges and opportunities:

- **Setting the tone for progressive high school education**
- **Catalyzing future progressive high school projects**

Project Scope: Transcending Aspect

Through both phases, the project strategically shifts the character of the campus from uniform and predictable to dynamic and experientially stimulating. The newly formed sequences of spaces, from public external areas to informal interior spaces, establish "spatial discovery" as a transformational tool to reshape the physical environment of the campus. This design approach rejuvenated the existing campus to deliver a relevant and engaging contemporary learning environment throughout the outdoor and interior spaces.

Budget

Budget, Phase 2:	$39,384,979	Completion:	2016

Phase 2 Scope

New Academic Building:	30,349 SF
New Music Building:	11,566 SF
Gym Renovation:	55,547 SF
Fields:	3 New Athletic Fields, Lighting, and Bleachers

New academic building

Phase 2 — Planning Goals

In recent years, prior to Phase 2, the District's progressive educational goals provided an inspiring planning framework. The District's leadership deserves credit for working closely with the steering committee and design team to ensure that the built outcome accomplished their objectives. The planning and design process involved eight meetings to explore numerous options.

The design team summarized the project goals as follows:

- **Foster project based learning (PBL)**: Allow flexibility for PBL across the whole building.
- **Support an interdisciplinary curriculum:** Provide adjacencies and spatial connections to support multiple possibilities for teacher collaboration across subjects.
- **Connectivity:** Provide flexible connectivity to allow multiple space configurations and team assignments that invite use by individuals, or small and medium groups.

Additionally, recent research pointed to an important related consideration that would make the original goals above more successful for students of all predispositions.

- **Quiet needs:** The design offers plenty of spaces where introverted students flourish. Small conference rooms with good visibility promote PBL brainstorming in a variety of settings.

In summary, the new Academic Building presented a **challenge and an opportunity to create a forward-looking educational facility** that adapts to many modes of individual and group learning.

PHASE 2 AND PHASE 1

Site Plan

1 new academic building
2 gym/pool renovation & addition
3 new music building
4 phase 1 - new academic building
5 Art/CTE
6 No Work
Phase 2 New Construction
Phase 2 Renovation

Project Scope: Physical Aspect

The new academic buildings (from both phases) replace seven existing buildings and eight portables to consolidate the campus. The regained site area was developed with planting, plazas, and parking. The new buildings house a range of spaces, including informal campus presentation area; shared collaborative areas; general classrooms; science and computer labs; therapeutic learning center; library; and administration and guidance centers.

PHASE 2: NEW ACADEMIC BUILDING

second floor

first floor

1 informal campus presentation area
2 shared collaboration space
3 media classroom
4 media studio
5 culinary arts
6 ideation room
7 autism classroom
8 classroom space
9 conference rooms
10 faculty room

Campus Transformation

Physical Environment — New Academic Building: Phase 2

▲ New academic building: Classrooms can be completely open to each other and to the shared space.

PROJECT BASED LEARNING

Teachers have ample options to split the class into small groups for project based assignments.

Multiple spaces and seating areas allow students with all predispositions to be effective in a project-based learning mode.

Educational Environment — Enhancing Spatial Choices for Project Based Learning

SUPPORT INTERDISCIPLINARY CURRICULUM

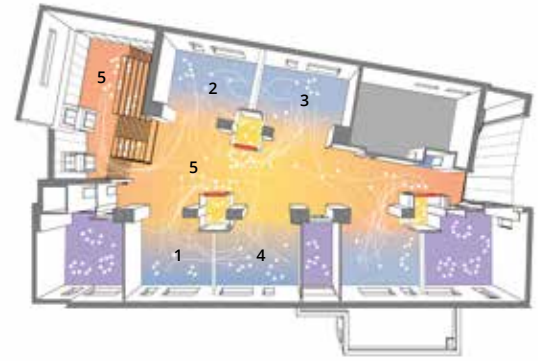
The new academic building's culinary program is an example of interdisciplinary, project-based learning.

FARM TO TABLE

Students plant and grow food in planters outside of the culinary classroom.

PHASE 2: NEW ACADEMIC BUILDING

Openness and Connectivity



PROJECT TASK: OPENING A RESTAURANT

1. **Project ideation** (*Social Studies:* creative thinking, collaboration, research)
2. **Business class** (*Math Studies:* **costs and revenues**)
3. **Media/graphic design class** (*Art:* graphic design, digital and web design to **conceive and design menus for posters and internet promotion**)
4. **Prepare meals** (*Culinary Studies*: **nutrition, chemistry, creative problem solving**)
5. **Present meal and design concept to the staff** (*Soft Skills*: **develop** presentation and collaboration skills to **receive grades for the entire process**)

Educational Environment — Phased Path to New Scenarios of Interdisciplinary Learning

Informal Learning Area is a Campus-Wide Amenity

Informal presentation area

The informal presentation area is at the confluence of serendipidous program adjacencies. It serves as an impromtu and/or scheduled space for the adjacent arts and vocational building, science program in the first phase building, and possible scheduling for oher programs on the campus.

A hub for creative activities across the campus, the space enhances the sense of a campus neighborhood and school community as a whole.

Educational Environment — Macro Connectivity Across the Campus

▲ Connectivity: Five spaces of different size and character are visually and physically connected.

Educational Environment — Space Depth — Physical and Visual Connections

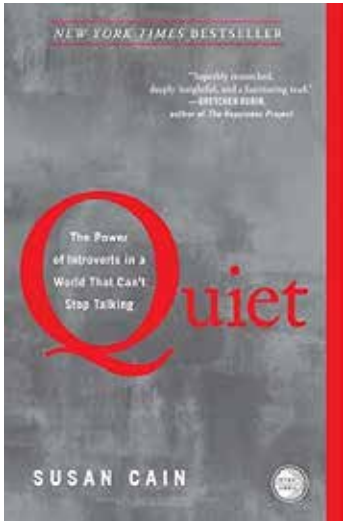
1 Connectivity: The small conference room is just a large informal presentation area.

2 Full-width glazed operable wall connects the ideation room and culinary classroom.

CONNECTIVITY FOR FLEXIBILITY

Spaces of different scales and character have full connectivity for flexibile educational and social use.

New academic building - 2nd floor



QUIET

Susan Cain's book "Quiet: the Power of Introverts in a World That Can't Stop Talking" emphatically brings to the forefront what introverted students need to be effective in group-based activities.

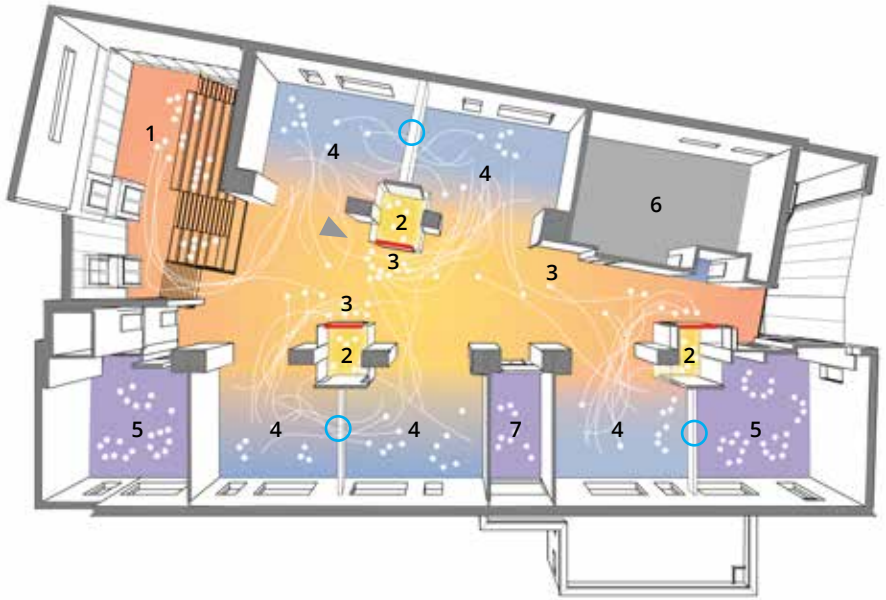
This project's design introduces a series of enclosed, but transparent, small conference rooms and small scale collaborative areas to **provide more spatial choices to all students.**

Educational Environment — Enhancing Spatial Choices for Project Based Learning

Small conference rooms help address needs of quiet students

CONNECTIVITY FOR FLEXIBILITY

Offering a variety of spaces with different characters helps both introverted and extroverted students to find their preferred spots.

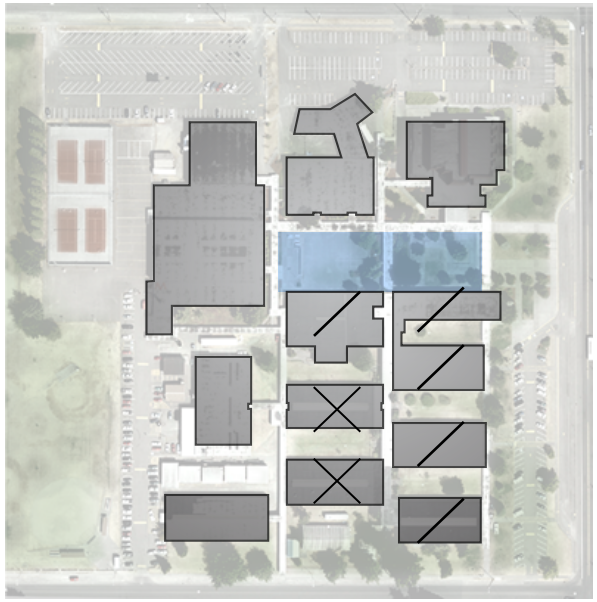


1 Informal Presentation Area
2 Small Conference Room
3 Informal Collaboration Space
4 Flexible Classrom
5 Dedicated Classroom
6 Utility Core
7 Staff Room
○ Operable Glass Partitions

The new Academic Building at Wilson High School supports flexible learning and encourages collaboration between teachers and students. Classrooms are connected between themselves and to a shared area by operable glass partitions, which can be closed for acoustic separation or left open to allow flow between spaces. Brightly-colored meeting rooms facilitate small-group interactions, and an informal presentation area provides ample seating for large group presentations and activities. Markerboard panel walls and soft seating support spontaneous discussions throughout the space.

Collaboration and learning happen everywhere.

Educational Environment — Enhancing Spatial Choices for Project Based Learning



BEFORE

Phase 1 Demo

Phase 2 Demo

PHASE 1: BEFORE & AFTER AT THE SAME TIME

- Construction happened with campus in use

AFTER PHASE 1

PHASE 1

1 New academic building

2 Campus administration

Existing Buildings on the campus
- no work in Phase 1

Project Scope: Transcending Aspect

The project transforms the experiential character of the campus from uniform and predictable to dynamic and experientially stimulating. The newly formed sequences of spaces, from public external areas to private internal campus spaces, establish "spatial discovery" as a transformational tool to reshape the physical environment of the campus.

BEFORE

BEFORE

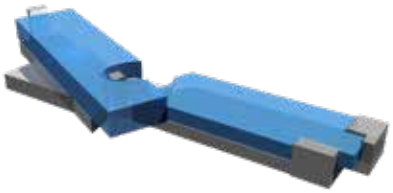
CAMPUS NEIGHBORHOOD

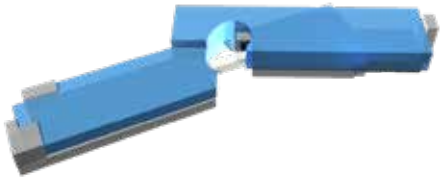
Physical Environment — Context: Existing Campus and Phase 1 Building

Physical Environment — Context: New Architectural Expression Defined in Phase 1

Physical Environment — Context: New Architectural Expression Defined in Phase 1

New academic building continues architectural expression defined in Phase 1





MATERIAL TEXTURE STUDIES

Textured corrugated skin with smooth panels at cut-outs

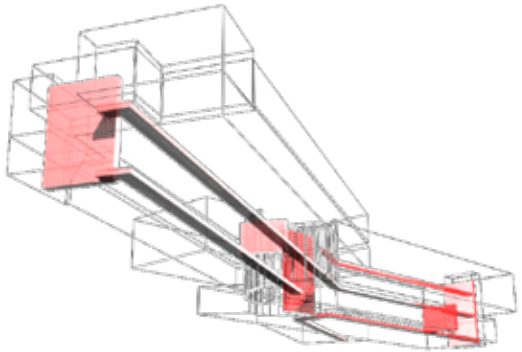
Ground face masonry base and edges

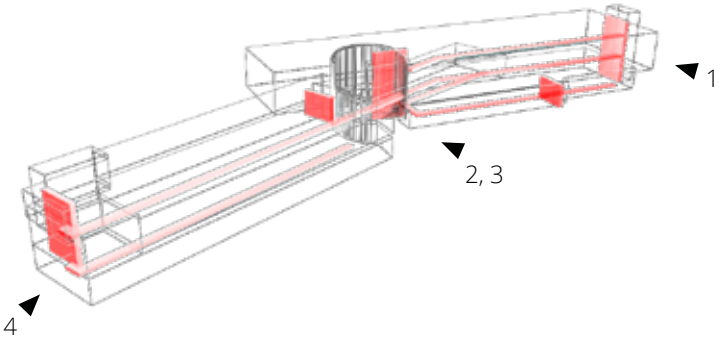
Physical Environment - Campus Coherence: Continuing Architectural Expression from Phase 1

1

2

3





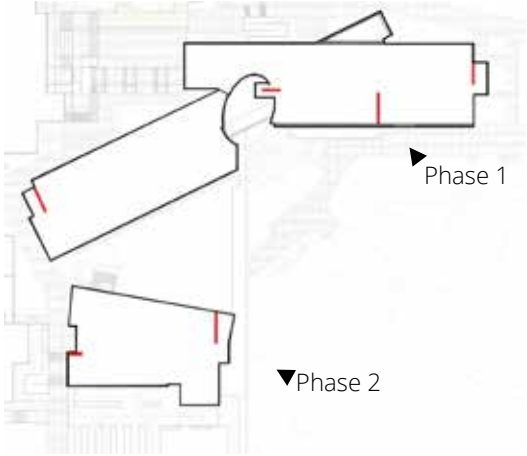
Red wall planes mark main entries at key circulation points

4

Physical Environment — Campus Context: New Wayfinding Defined in Phase 1

Phase 2: New Academic Building Entry

Phase 1: Admin Entry



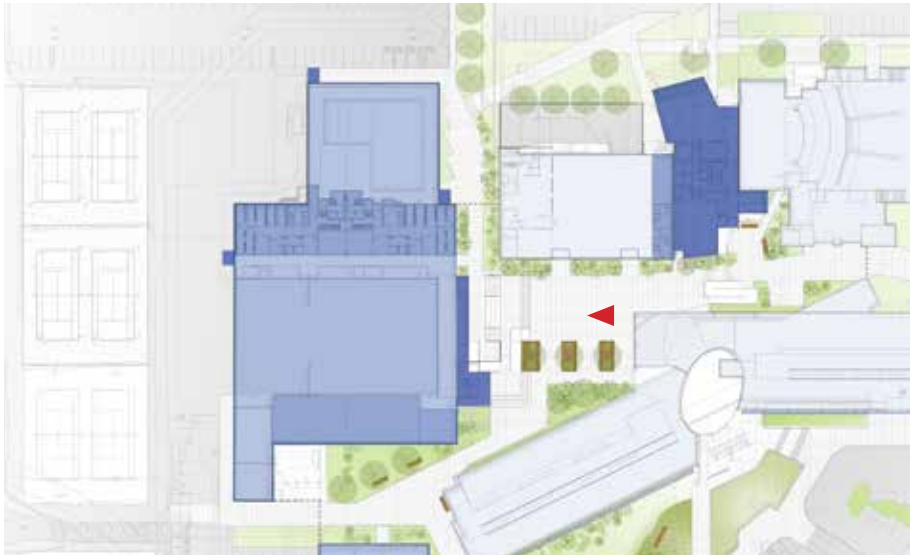
Phase 2 design bulids on wayfinding defined in the first phase. Red walls mark entries and key circulation points.

Physical Environment — Campus Coherence: Continuing Wayfinding Defined in Phase 1

Phase 1 established a series of informal transitional spaces condusive to serendipitous gathering and socializing.

Physical Environment — Campus Transformation: New Socializing Spaces — Phase 1

Former barrier edge of courtyard has been transformed into a welcoming students' and community socializing and performance space



Gym Remodel and Lobby Renovation and Addition

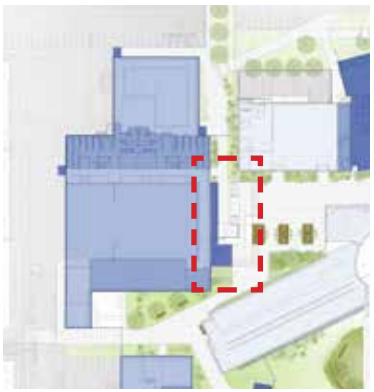
Before

MODERNIZED GYM LOBBY & COURTYARD

Physical Environment — New Spaces for Socializing: Gym Transformation — Phase 2

The gym and lobby's addition and renovation transform the formerly utilitarian space into a welcoming, socialzing space for students and the broader school community

BEFORE



Physical Environment — New Spaces for Socializing — Gym Lobby Transformation in Phase 2

PHASE 2

PHASE 1

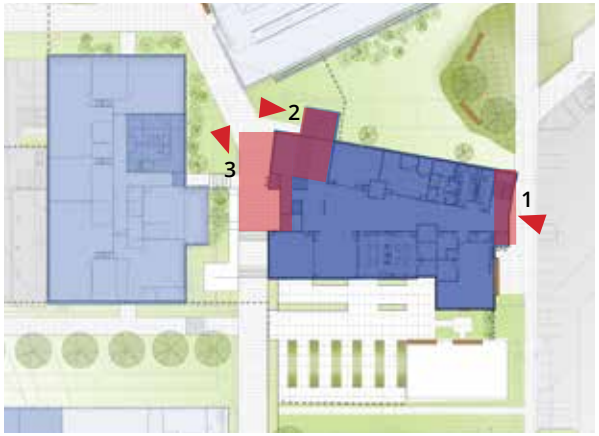
PHASE 2

Physical Environment — Campus Transformation: New Spaces for Socializing — Phase 2 and 1

Steps outside of informal presentation area provide shaded amenity. 2

Circulation on the west side has been transformed into a mini plaza with perching spaces. 3

1



Informal Socializing Space Use

The new academic building engages the campus by providing ample socializing spaces around its exterior and at the interior thresholds to the building.

While relatively small in size, the new academic building establishes a rich fabric of transitional spaces at both entry sides of the building.

Post Occupancy — Observations: New Academic Building's Campus Impact

Informal Space Use: “Change of Heart”

During the project’s planning and design phase, one key teacher heavily objected to having an informal presentation area, considering it “a wasted space.” Explaining all of its multi-purpose benefits was to no avail, so the District’s visionary leadership deserves credit for ensuring that it remained in the project.

We have seen and heard about the numerous uses of this space that already exceed our initial plans and wildest hopes for it.

◀ Here is the moment when the teacher who objected strongly to this space gives a presentation to the parent community about all the wonderful programs and scholarship opportunities at Wilson High School. (Not seen in this photo, the teacher is around the corner on the right hand side.)

Design goal: SUPPORT INTERDISCIPLINARY CURRICULUM

Led by energetic, progressive-minded culinary arts teachers, the program has taken full advantage of spatial opportunities designed to take interdisciplinary learning to the next level. We have seen and heard about students' increased enthusiasm for the program.

Students conceptualize their products, analyze them from different disciplines, prepare them, and present the concept and tasting to the staff.

The students get graded wholistically:

-On the process

-For every step of the activity

-For the outcome

-For the presentation

Post Occupancy — Observations: Innovative Education and Grading Process

QUIET

Ample spaces of different character encourage collaboration for students of all predispositions