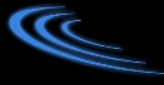




Gateway Community College | New Haven, CT

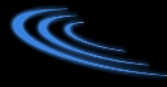
Bradley Sisenwain



## General Building Data




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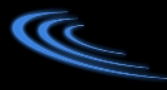
- Occupation and Function Types: Assembly (A-2, A-3), Business (B), Educational (E), Mercantile (M), Storage (S-2)
- Size (total square feet): 369,000 SF
- Architects: Perkins & Will ([www.perkinswill.com](http://www.perkinswill.com))
- Lighting Designer: Horton Lees Brogden Lighting Design ([www.hlbldesign.com](http://www.hlbldesign.com))
- Dates of construction: 2009 - 2012
- Actual cost information: \$147 Million
- Project delivery method: Design - Bid - Build



# Architectural Intent



-  Merge Long Warf and North Haven campuses in one location
-  Create a new identity for education facility
-  LEED® Gold certification



## Redesigned Space Locations

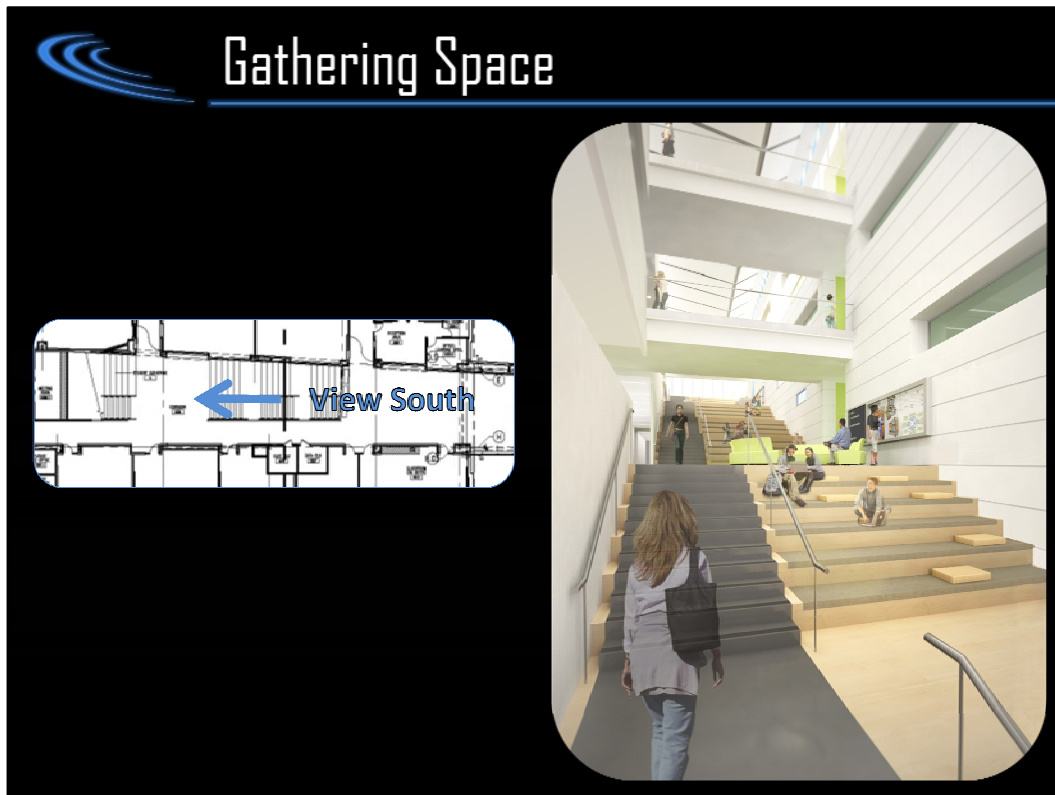


Student Gathering




Tiered Classroom

Library / Roof Garden





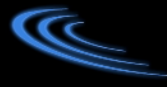


### Architectural Functions

-  Central transition running north and south
-  P+Ws vision of an "Interior Street"
-  Four-story white masonry wall connects to two of three other spaces

### Points of interest

-  Window boxes (to interior spaces), display boxes, directories, and office alcoves surround the main stair of the gathering space.
-  Accenting these features will serve task purposes and create visual interest around the periphery of the space.



# Gathering Space



## DESIGN CONSIDERATIONS

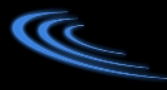
- Appearance of space and luminaires
- Maintenance
- Direct glare
- Light distribution on surfaces
- Modeling of faces and objects
- Elimination of varying shadows





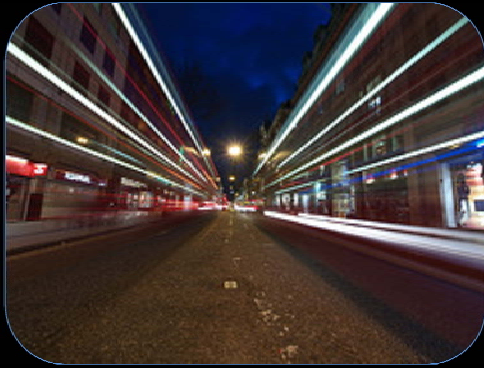
### Balance

-  Mimicking the effects of daylight at night for a balanced lighting effect
-  Highlighting the white masonry wall present in other spaces to create a balance of illuminance on the large feature



# Gathering Space Inspiration:

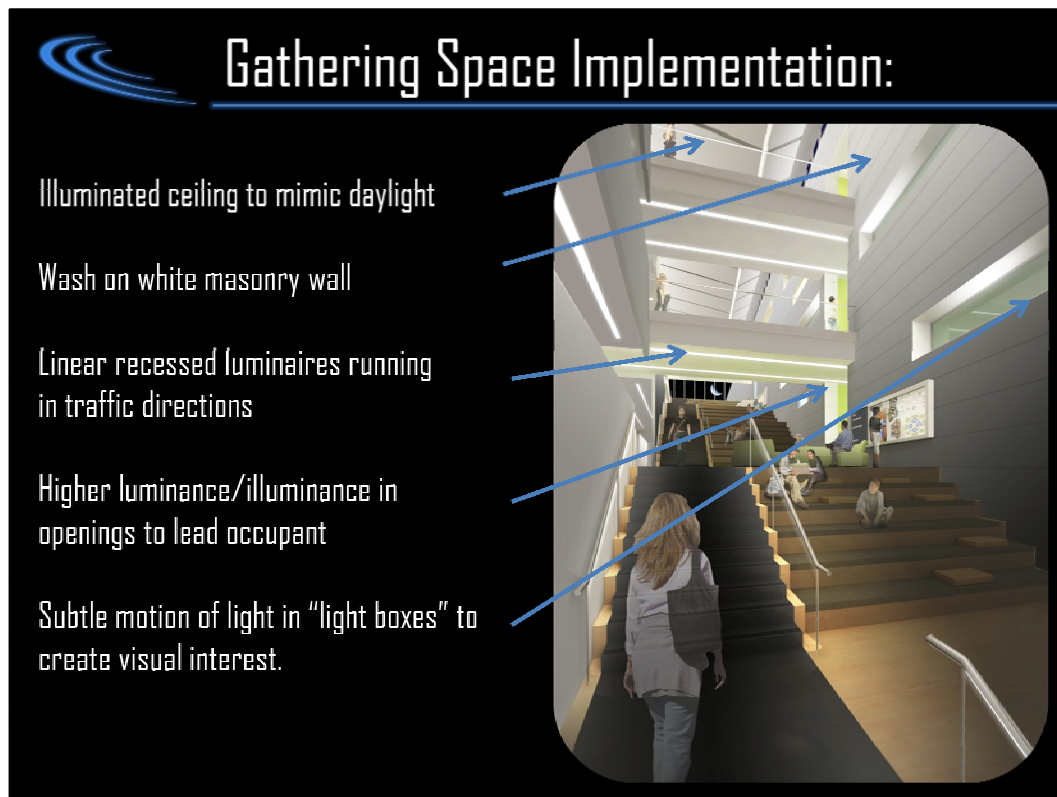
## MOTION



Direction of traffic with light










Using motion to create the feeling of an exterior street

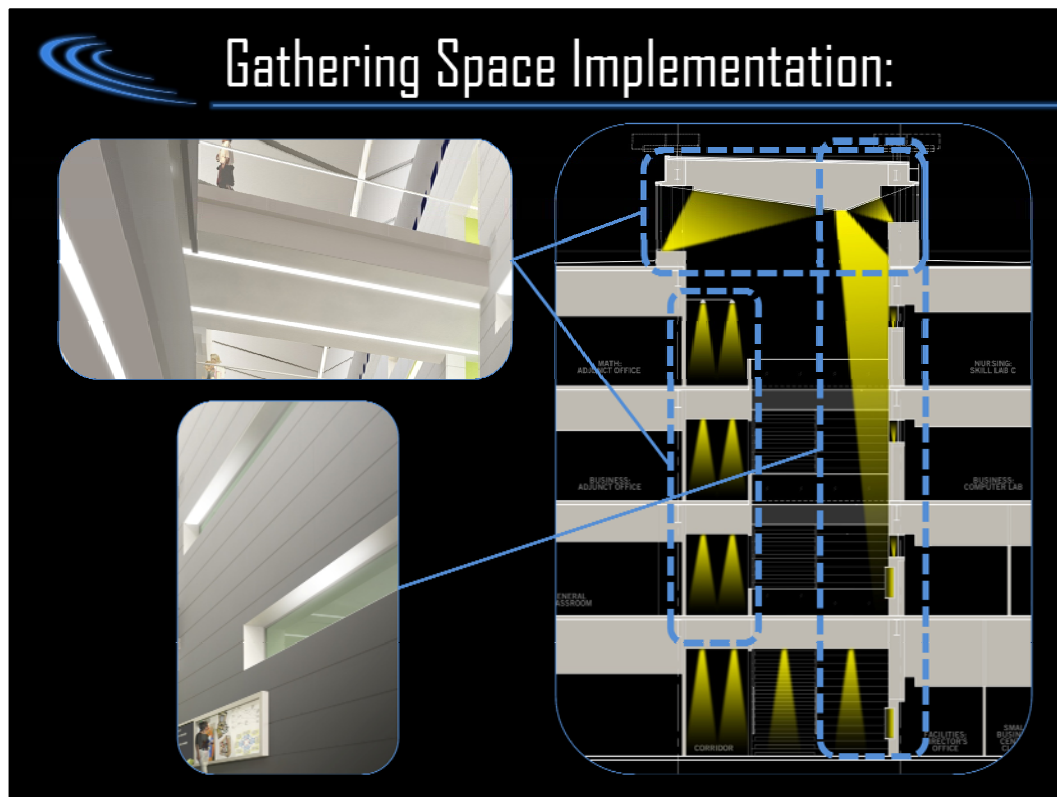


### Program Statement

Student gathering is the central transition space in GCC, and is meant to be P+W's version of an interior street. Analogous impressions to the roof garden will be created throughout the exaggerated stair/corridor. The five-story-high white masonry unit wall continues from the gathering space to the roof garden and will be lighted similarly to maintain cohesiveness between spaces. Lighting and emphasis on walls will contribute to the impression of preference while additional general non-uniform lighting will facilitate passage through the space. Daylight is an important factor in this space as well. Like the library, daylight should be used to conserve electric power and efficiently light the space (when possible). Localized lighting will be placed to mark means of access to other areas of the college.

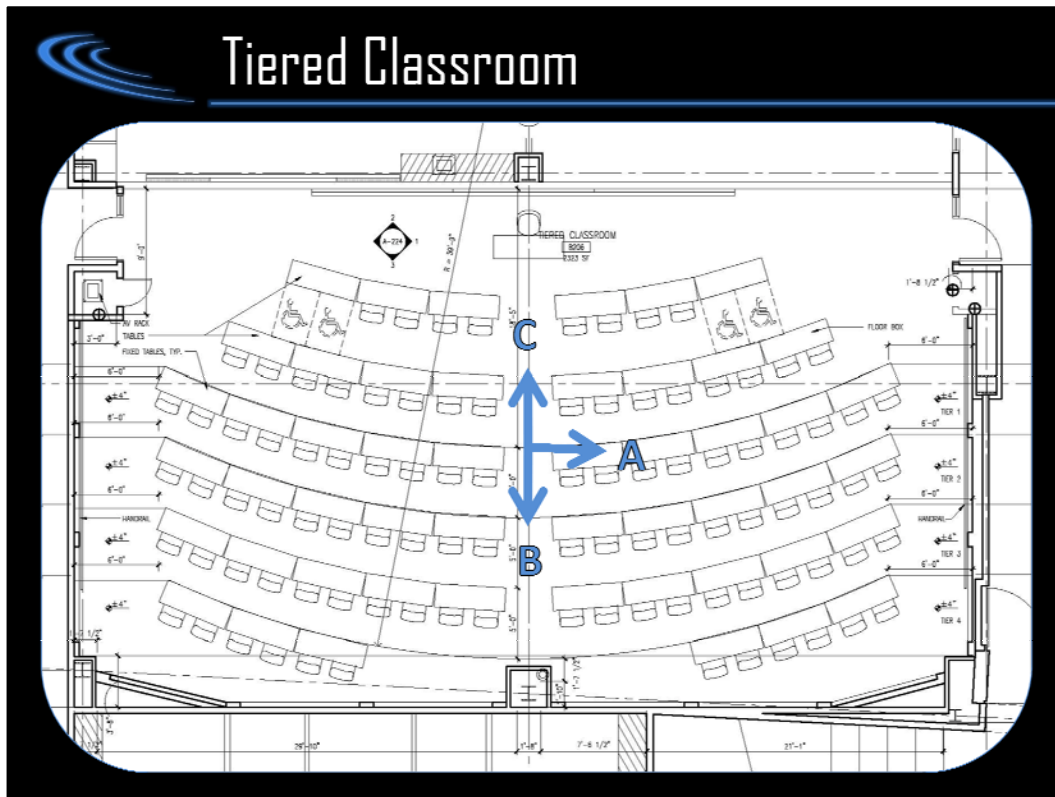
### Lighting Implementation

-  Illuminated ceiling to mimic daylight
-  Wash on white masonry wall to tie spaces together
-  Linear recessed luminaires running in traffic directions
-  Higher luminance/illuminance in openings to lead occupant
-  Subtle motion of light in "light boxes" to create visual interest.
-  Back-lit directories for the exchange of information
-  Rail-lighting for added localized light







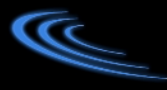
### Locations of Light

- Light coming from clerestory sills illuminates the ceiling panels
- Recessed luminaires within the ceiling panels create the even wash on white masonry wall
- The eastern walkway (on the left of the section) is illuminated by linear luminaires running along the length of the corridors
- The fourth level of these corridors is illuminated by the same luminaire but it would require a different mounting condition since there is no ceiling located within the same distance
- Light emanating from the green openings (below bridges) is created by the same luminaires on the bottom of the bridge above. This graze causes the transition walls to have a higher luminance and therefore attract attention and facilitate movement

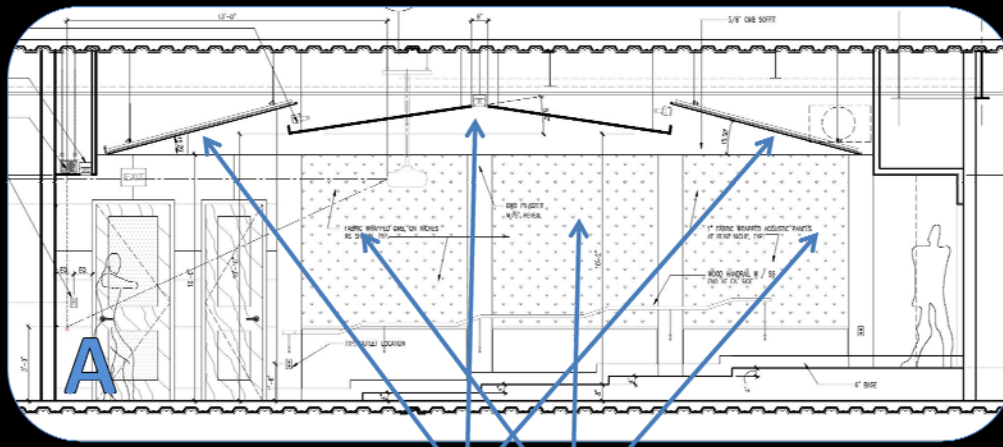


## Architectural Features

-  Continental seating
-  Electric projection screen/projector
-  Custom drop-ceiling
-  Acoustic panels

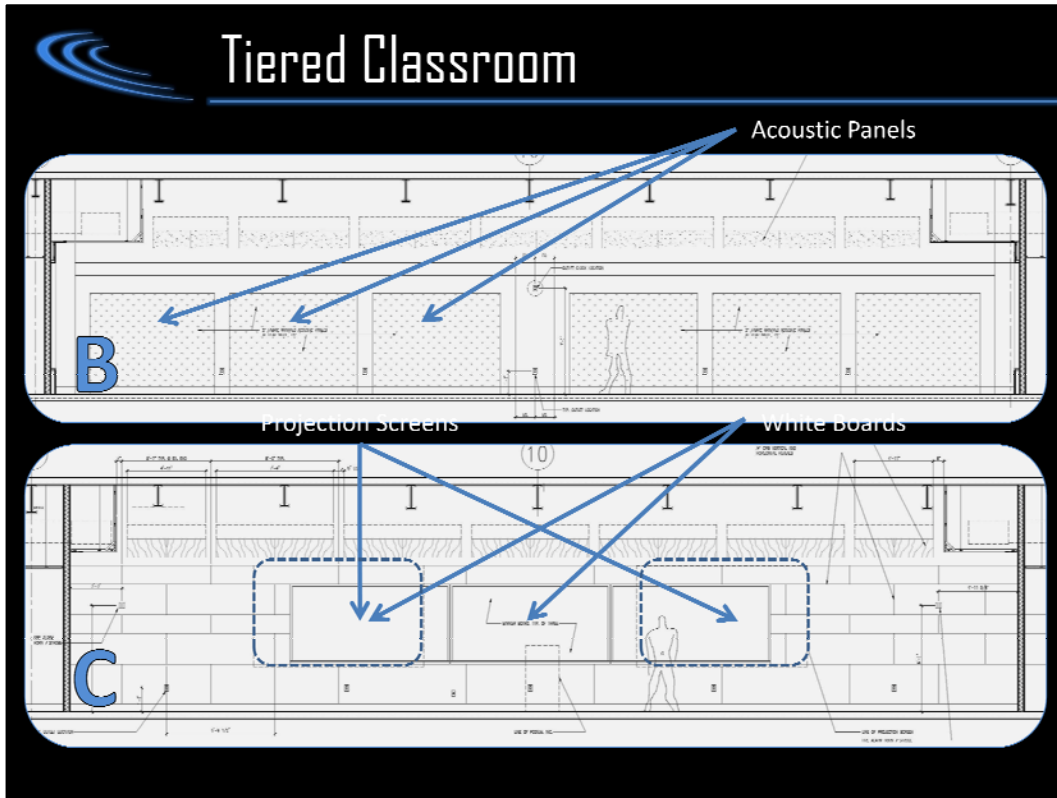


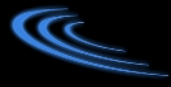
# Tiered Classroom



Custom Drop Panel Layout  
Acoustic Panels





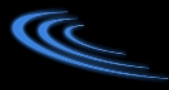


# Tiered Classroom

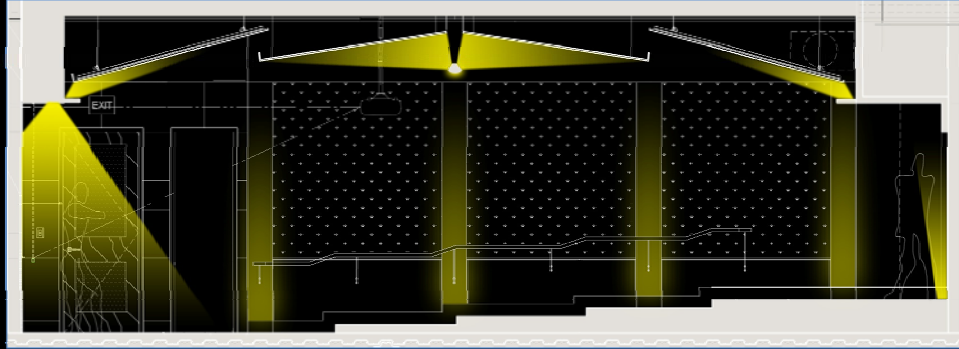
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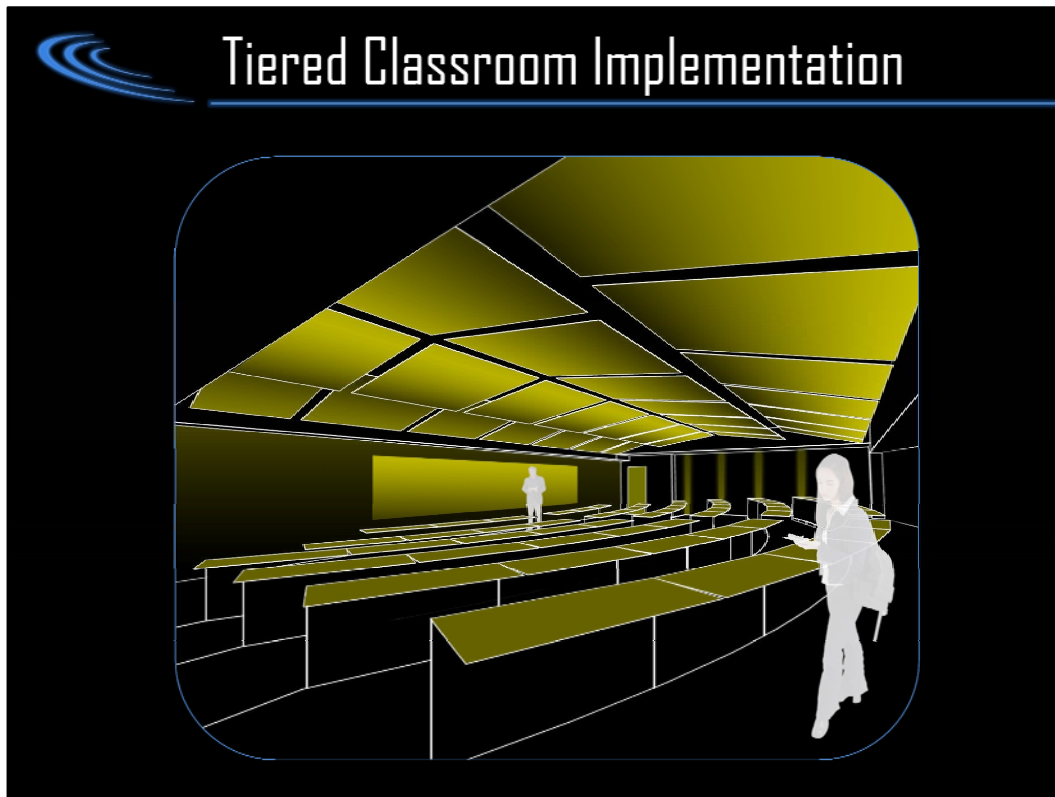
## DESIGN CONSIDERATIONS

- Direct glare
- Light distribution on surfaces
- Modeling of faces and objects
- Source / task / eye geometry
- System control and flexibility
- Elimination of varying shadows



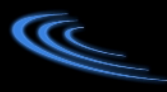
# Tiered Classroom Implementation



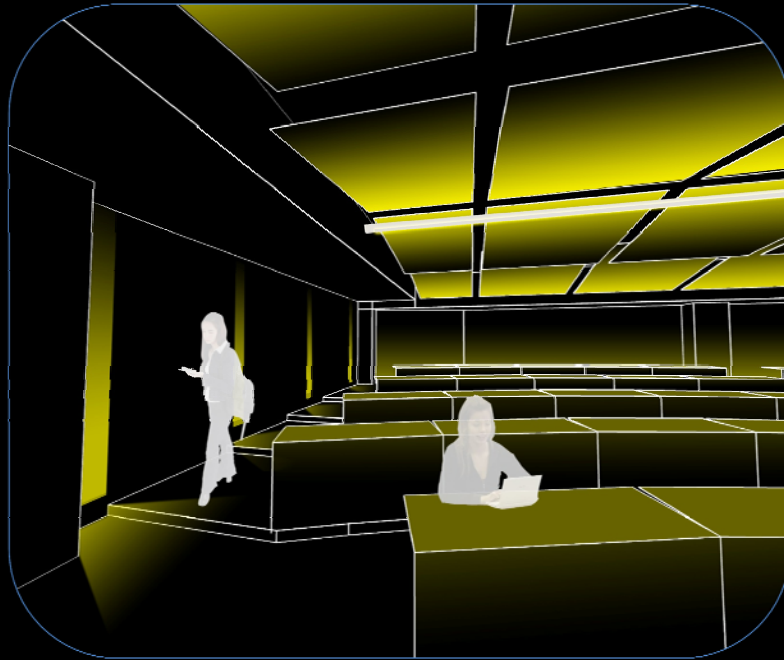


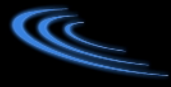
### **Program Statement**

This is the other work space amongst my chosen spaces. Classrooms often incorporate a number of activities—which means a number of tasks—into lessons. This classroom is no different. The lighting should reflect the variability within the space and the specific task at hand at any time. Uniform lighting will be needed for typical classroom activities and to add to the impression of clarity. Peripheral modes could be incorporated during multiple tasks for added light (and interest) into the space. A variable control of systems should be available to occupants; who will have the need to change lighting effects and settings per task. Glare and distracting lighting elements should be avoided.



# Tiered Classroom Implementation





## Redesigned Spaces

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